The Economic Impact of Canadian Copyright Industries – Sectoral Analysis

Final Report

Submitted to the Copyright Policy Branch Department of Canadian Heritage

March 31, 2006

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The Economic Impact of Canadian Copyright Industries – Sectoral Analysis

Final Report

Executive Summary

CONNECTUS Consulting Inc. (CONNECTUS) is pleased to present its Report to the Department of Canadian Heritage (the Department) with respect to RFP 10051839/05, *The Economic Impact of Canadian Copyright Industries – Sectoral Analysis* (the Study).

This Study provides the Department with a complete and updated assessment of the impact of Copyright Industries on the Canadian economy for the years 1997 to 2004. The Study is comprised of (i) quantitative measurements and analysis including contribution of the Copyright Industries to GDP, Employment and Balance of Trade and (ii) qualitative assessments of current and future issues facing Canada's Copyright Industries derived through a series of interviews and an e-mail survey.

According to the World Intellectual Property Organization (WIPO), Copyright-based industries are those engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter.

The importance of the Copyright Industries – essentially those industries engaged in the production and distribution what is largely *cultural and software* content – cannot be underestimated for the benefits both tangible and intangible that they confer on a society. An analysis of Canada's Copyright Industries that includes an assessment of their value-added component, employment contribution, and trade status must also include the perspectives of industry leaders on the current trends and challenges that directly and indirectly affect their bottom line.

Our approach to this Study has therefore been to collect data and evidence to the extent possible on Canada's 'core' Copyright Industries, and to further apply a qualitative assessment of the meaning behind the graphs and charts. What we find is that our Copyright Industries tend to be influenced by similar factors across industries – with some factors exerting more influence than others depending on the sector in question.

What we also find is that Canada's Copyright Industries are performing in very similar fashion, in terms of the trends we have noted in our quantitative analysis. It is therefore important from the perspective of both policy planning and policy-making that the more 'technical' industries of *Software and Databases* are behaving much the same in the marketplace of the more 'content-driven' industries of *Press and Literature* or *Motion Picture and Video*.

With respect to defining the 'core' Copyright Industries and 'non-core' Copyright Industries, WIPO has developed a comprehensive set of guidelines and definitions that we have largely adhered to throughout the course of the Study.

The 'core' industries are identified as:

- Press and Literature including authors, writers, translators, newspapers, magazines, book publishing, music publishing, software publishing and libraries.
- > Theatrical and Music Productions/Opera including choreographers, directors, acting and musical performers and allied agencies.
- ➤ Motion Picture and Video Industries include writers, directors, actors, production, distribution and exhibition, sales and rentals. Also included is the sub-sector of the Sound Recording Industry.
- ➤ Radio and Television including conventional radio and television broadcasting, cable distribution undertakings and Direct-to-Home (DTH) distribution services.
- ➤ Software, Databases and New Media including programming development and design, software and video games, database processing, web portals, on-line services and Internet Service Providers (ISPs).
- Advertising Services including advertising agencies, media buying services, public relations services, media representatives, display ads and direct mail services.
- ➤ Photography, Visual and Graphic Arts.
- Copyright Collective Management Societies.

We have applied the standardized North American Industrial Classification System – or NAICS – to the above noted definitions for purposes of our data collection and analysis. Further, we have followed WIPO recommendations for those sector sub-categories that should be included in the analysis.

For these reasons, the Study does not include *Photography, Visual and Graphic Arts*. WIPO identifies the relevant categories under *Photography, Visual and Graphic Arts* as Photographic Services (NAICS 54192) and Graphic Design Services (NAICS 54143). Statistics Canada was unable to provide reliable data for these subcategories alone, and it was our belief that NAICS 5414 and 5419 contained too many categories that are not relevant to the Copyright Industries.

Data on *Copyright Collective Management Societies* is not available from Statistics Canada, and this category is therefore not included for purposes of the Study.

Overall Contribution to GDP

Canada's Copyright Industries comprise 4.5 percent of the Canadian economy (\$46.8 billion calculated in 1997 chained dollars) with core industries representing 3.3 (\$34.7 billion) percent and non-core industries representing an additional 1.2 percent (\$12.1 billion).

In general over the 1997 to 2004 period, Copyright Industries have tended to outperform or show relative stability with the Canadian economy (GDP) overall. In the period between 1997 and 2004, Canada's core Copyright Industries demonstrated a relatively steady pattern of growth and stability, with a 'softening' or 'tailing off' evident in the 2003 and 2004 years.

Relative to the average annual growth of the Canadian economy at 3.5 percent in the 1997-2004 period, the core Copyright Industries grew at a faster rate of 5.7 percent. Annual growth rates in the Copyright Industries were lead by the *Software and Database Industries*, which grew at a rate of 11.4 percent between 1997 and 2004, increasing from \$5.76 billion in 1997 to \$12.2 billion in 2004.

Indeed, continuous growth in the Copyright Industries has been driven in part by the *Software and Database Industries*, which had spectacular growth during the dot-com boom of the late 1990's but has since tailed off into the relatively *cyclical* pattern of other content-based sectors.

A widely perceived period of 'softening' in 2003 and 2004 is largely attributed to three key reasons:

➤ The rapid development of technology has contributed to a cooling off period in some of the Copyright Industries, as some sectors have taken a 'wait and see'

approach in determining how to best leverage or adapt technology to achieve maximum benefits;

- ➤ The growing shortage of skill sets in an era of rapidly advancing technology in several Copyright Industries but especially in the *Software and Database Industries* is perceived as a contributing factor to this period of 'softening'; and
- ➤ Continuing and/or escalating difficulties in accessing capital from investors/ financial institutions are perceived as inhibiting the potential growth of many Copyright Industries. A key reason for this centers on the reluctance or inability of investors to fully understand the economic value of rights.

Overall Contribution to Employment

Canada's core Copyright Industries employed just over 655,000 people in 2004, or 4.11 percent of total Canadian employment. Approximately 219,000 people were employed in non-core Copyright Industries in 2004; together, the Copyright Industries represented 5.55 percent of total Canadian employment in 2004.

Employment in the Copyright Industries has remained relatively stable in the 1997 to 2004 period, peaking at 4.3 percent in the core Copyright Industries in 2001. Most of the core Copyright Industries outperformed the 2.2 percent job growth in the Canadian economy as whole for the 1997 to 2004 period. Once again, the *Software and Database Industries* lead all sectors in employment growth, increasing by nearly 100,000 between 1997 and 2004.

Similar to the contribution of the Copyright Industries to GDP, their contribution to employment has developed a cyclical pattern with a cooling off evident in 2003 and 2004. The impact of technology, shortage/concern over skill sets and lack of access to capital have all fundamentally affected pattern of employment contribution in the Copyright Industries, as they have affected value-added contribution.

There is a widely held view that advanced technology-related skills (e.g. computer engineers and analysts) may be the most difficult to access going forward, while access to the skills required for content-driven industries (e.g. writers, actors) are viewed a less problematic with a healthy pool of talent available.

The current 'softening' of Copyright Industries' value added and employment contribution to the Canadian economy in not generally expected to persist.

Balance of Trade

There is little doubt that given the proximity of Canada to the United States and the massive volume of cultural goods imported by Canada, we remain a net importer of Copyright Industries goods.

Canada's overall trade balance in the Copyright Industries reflects a deficit of \$3.2 billion. *Software Royalty Payments* and *Advertising* maintain the strongest trade surplus at \$317 million and \$242.4 million respectively. With the exception of increased trade surpluses in the *Advertising* and *Software* sectors, the balance of trade has remained relatively stable with slight increases in trade deficits in selected sectors and sub-sectors over the 1997 to 2004 period.

The evidence indicates that Canada is generally 'holding its own' so far as the balance of trade in largely content-based industries is concerned, and further indicates that the trade deficit in the Copyright Industries has eased slightly. But there is a prevailing view that this trade deficit is difficult to shrink over time, and a healthier export sector in the Copyright Industries is mandatory to improve the balance of trade overall.

Analysis by Sector

With respect to the value-added contribution of the *Press and Literature Industries* to the Canadian economy, the data illustrate a period of growth between 1997 and 2001, stability in 2002 and 2003, and a slight softening in 2003 and 2004.

As a mature core Copyright Industry, the *Press and Literature Industries* show cyclical trending over time, although the sector underperformed the Canadian economy in 2003 and 2004. Employment in the sector follows a similar, wave-like trend.

Respondents from this sector cited difficulties in accessing capital and structural changes in the book publishing industry as key issues and events affecting their bottom line. Technology is viewed as a key driver to the change in business models in book and magazine publishing, while competition from foreign content remains a daily reality for the sector.

Both newspaper and magazine publishing industries indicated concern over growth in digital content offerings, and the need to develop new revenue streams such as Direct to Consumer pharmaceutical advertising. There is a perceived need for the establishment of a predictable rights regime for digital content, and no real anticipation of large-scale consolidation taking place in the next three- to five-year period.

The *Theatrical and Music Production/Opera Industries* follow a similar wave-like cyclical pattern in their contribution to GDP and employment in the Canadian economy. Similar to other cultural sectors in the Copyright Industries, this sector has difficulty acquiring access to capital due to very low profit margins. While Canada Council funding was doubled by the previous government in November 2004, long term sustainable funding remains a core issue for this sector.

This sector includes venues such as theatres, nightclubs and other establishments subject to municipal by-laws on smoking. Subsequent if temporary reductions in venue attendance are viewed by respondents as contributing to the flattening of financial performance in the sector.

Technology has both added costs and enabled efficiencies within the *Theatrical and Music Production/Opera Industries*. While performance quality and paid attendance can be improved through technology-based staging advancements, these can be costly to implement and maintain. At the same time however, technology has also allowed for more sophisticated marketing and promotion of the performing arts.

Neither concern over access to skills nor potential industry consolidation factor in as issues in to this sector.

Within the *Motion Picture and Video Industries*, both value-added and employment contributions to the Canadian economy have shown upward trends in the 1997 to 2004 period, with a slight decline evident in 2004.

Access to capital is ranked as the number one issue by respondents from the *Motion Picture and Video Industries*; once again, respondents noted that the investment community tends to be dissuaded by the low profitability of the sector and tends to lack understanding about the value of rights ownership.

Difficulties in accessing capital have also been exacerbated by changes in access to export markets by television programming and feature film producers. At the same time, the importance of accessing internationally-based financing for productions is growing, especially for the service production industry in British Columbia.

Technology has also impacted the *Motion Picture and Video Industries* through the development of new platforms for content delivery and increases to the costs of dramatic programming produced for High Definition television.

Skills development is also seen as a high priority for the industry. While the pool of talent is generally strong, there is concern over the long term sustainability of

skills without more post-secondary training opportunities and more industry-based internship and mentorship opportunities.

Respondents also raised the need for determining ownership of digital rights for content through copyright legislation, since this is currently unclear and could potentially draw additional revenues to the sector.

Consolidation in the industry is viewed as unlikely to take place, but partnerships and alliances will continue to be formed to take advantage of domestic and international opportunities.

The evidence indicates that the *Radio and Television Industries* have been very stable throughout the 1997 to 2004 period, with a steady trend of modest increases to value-added and employment contributions between 2001 and 2004. As a mature Copyright Industry, the sector shows cyclical trending over time.

The *Radio and Television Industries* are currently undergoing a major transformation in their traditional business models, owing to several factors including the development of new/unregulated platforms for content distribution and increasing fragmentation of content services in the marketplace, which are both likely to have a major impact on the industry in the years ahead. The Internet, peer to peer file sharing, personal communications devices such as cell phones and iPods and other advancements are drawing viewers and listeners (and hence, advertising revenues) away from conventional broadcasters as content offerings expand on these alternative platforms.

The cost of technology investment in the current timeframe and going forward in the next five to 10-year period are also viewed as dramatic, primarily driven by the conversion to digital transmission required for High Definition television and Digital Radio Broadcasting.

Access to capital is less problematic for this sector, but profit margins – especially in the radio industry – are viewed as too low to attract major investors. Access to skills is not seen as a serious issue, and there is no sense that consolidation will take place in the industry to any major degree in the next few years. Government may undertake a review of the broadcasting industry as it has the telecom sector, which could potentially include a review of foreign ownership limits.

There is little doubt that the *Software and Database Industries* are an engine of value-added growth for the Copyright Industries overall contribution to the Canadian economy, but the sector has also experienced a slight period of cooling off in 2003 and 2004.

In contrast to other Copyright Industries, the number one concern in the *Software* and *Database Industries* revolves around availability of and access to the *skills* that will sustain growth in the industry going forward.

This is especially pronounced given the shift in the industry away from 'hardware' to 'software and services'. This has occurred in part because the costs of carriage, technology and storage of data have dropped while the 'interoperability' of systems and the use of common platforms have grown.

The current 'softening' or slowdown in the *Software and Database Industries* is attributed to several factors, and viewed as temporary in nature. The primary reason is that the industry has become more 'modularized' or silo-oriented by developing and marketing products and services on a smaller scale for target markets. The large scale enterprises and projects that ignited the dot-com boom have given way to a more 'silo-oriented' approach.

There is also a certain amount of consolidation taking place in the sector at present, where smaller firms that may experience financing problems in expanding domestically or in their efforts to enter international markets are (to a degree) being absorbed by larger enterprises, while the number of mid-size firms declines.

A further, significant concern expressed is the declining visibility of Canada as a global technology leader, where a lack of industry 'stars' is diminishing Canada's global ranking. In addition to this, a potential lack of skills available to the sector going forward would likely have an impact on the ability of Canada to improve its global standing, in terms of both image and bottom line growth.

The evidence with respect to the *Advertising Services Industries* indicates a period of steady growth between 1997 and 2001, a slight decline in 2002 and a continuing growth trend to 2004. Like *Radio and Television*, this sector has also resisted a softening in value-added and employment contribution to the Canadian economy.

Advertising services have generally benefited from strong management practices and movement of firms into and out of the marketplace. This sector tends to ride successful waves such as the 1999 dot-com boom while managing to diversify and find new streams of revenue when other sectors may experience difficulties.

The advertising services sector tends to be influenced by developments in other product and services markets, i.e. the 'clientele' of the advertising agencies. Technology is at once a major driver of new revenue streams as platforms for advertising-supported content expand. The Internet is continuing to grow as a source of advertising placement and revenue for the sector.

In addition, digital technology itself is enabling an enhanced level of product placement within programming content itself, such as the digital insertion of visual ads in live sporting events.

Entry into the sector is relatively easy, and the expansion of advertising-supported content platforms motivates new/smaller firms to set up business. Consolidation also tends to cycle through the industry, creating mid-size firms to compete for advertising contracts with much larger firms – and is expected to continue as an on-going trend in the industry.

As special part of our Report, we analyze the value-added and employment contribution of the *Sound Recording Industry*.

The GDP contribution of the *Sound Recording Industry* has steadily increased from \$243 million in 1999 to \$387 million in 2004 – despite major reductions in the product sales. This is primarily due to some industry consolidation, the exit of inefficient firms from the marketplace and reductions in employment levels. Technology as reduced the costs of production and distribution. It is telling that the *Sound Recording Industry* has consistently outperformed the Canadian GDP since 1999.

Our Report adds an additional layer of analysis by examining the relative share of employment for each of the core Copyright Industries, by province.

The Economic Impact of Canadian Copyright Industries – Sectoral Analysis

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This Study provides the Department with a complete and updated assessment of the impact of Copyright Industries on the Canadian economy for the years 1997 to 2004. The Study is comprised of (i) quantitative measurements and analysis along a number of variables (outlined below) and (ii) qualitative assessments of current and future issues facing Canada's Copyright Industries derived through a series of interviews and an e-mail survey.

Our Report is organized as follows.

Introduction – presents an overview of the Study and for purposes of the Study defines 'copyright-based industries', 'core industries' and 'non-core industries'. We also frame the Copyright Industries in the context of the Canadian economy.

Part I – The GDP/Value Added of Canada's Copyright Industries presents our overall quantitative and qualitative findings on the Gross Domestic Product (GDP) or value-added of Canada's Copyright Industries, focusing on a discussion of trends and underlying reasons for these trends. Perspectives on future trends are also discussed.

Part II – Employment in Canada's Copyright Industries presents our overall quantitative and qualitative findings on trends in employment in the Copyright Industries, including a discussion of key issues influencing the future direction of employment in these industries.

Part III – Trade in Canada's Copyright Industries presents a largely quantitative analysis of the balance of trade in each of the core sub-sectors examined for the Study, and includes a discussion on key issues underlying trade in the content/copyright industries.

Part IV – An Analysis of Canada's Core Copyright Industries by Sector presents our quantitative and qualitative findings in terms of GDP and employment on each of the core sectors analyzed, including:

- *A Press and Literature*
- *B* Theatrical and Music
- *C Motion Picture and Video*
- *D Radio and Television*
- *E Software and Databases*
- *F Advertising Services*

For each sector, we present a further analysis of our findings on employment by province in the Copyright Industries.

Part V – Focus on Sound Recording presents a special section of our Report on the Canadian sound recording industry, its contribution to GDP, balance of trade and key influencers on trends noted.

Part VI – Comparisons with Other Countries presents a brief discussion of the status of Canada's copyright industries versus two other international territories: the United States and Singapore.

Conclusion – presents our concluding note to the Study and some suggestions for further research.

We also include the following Appendices to our Study:

Appendix A – Methodological Approach to the Study

Appendix B – Differences Noted in Base Data: 2004 and 2006 Studies

Appendix C – List of Interview Respondents

Appendix D – List of Interview Questions

Appendix E – E-mail Survey and Respondents

Appendix F – About the Research Team

CONNECTUS thanks the Copyright Branch of the Department of Canadian Heritage for the privilege of undertaking this very important study.

Introduction

According to the World Intellectual Property Organization (WIPO), Copyright-based industries are those engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter.¹

The importance of the Copyright Industries – essentially those industries engaged in the production and distribution what is largely *cultural and software* content – cannot be underestimated for the benefits, both tangible and intangible, that they confer on a society. An analysis of Canada's Copyright Industries that includes an assessment of their value-added component, employment contribution, and trade status must also include the perspectives of industry leaders on the current trends and challenges that directly and indirectly affect their bottom line.

Our approach to this Study has therefore been to collect data and evidence to the extent possible on Canada's 'core' Copyright Industries, but to further apply a solid qualitative assessment of the meaning behind the graphs and charts. What we find is that our Copyright Industries tend to be influenced by similar factors across industries – with some factors exerting more influence than others depending on the sector in question.

What we also find is that Canada's Copyright Industries in a similar fashion when compared to one another, in terms of the trends we have noted in our analysis. It is therefore important from the perspective of both policy planning and policy-making that the more 'technical' industries of *Software and Databases* are behaving much the same in the marketplace of the more 'content-driven' industries of *Press and Literature* or *Motion Picture and Video*.

With respect to defining the 'core' Copyright Industries and 'non-core' Copyright Industries, WIPO has developed a comprehensive set of guidelines and definitions that we have applied throughout the course of the Study.

The 'core' industries are identified as:

- Press and Literature including authors, writers, translators, newspapers, magazines, book publishing, music publishing, software publishing and libraries.
- Theatrical and Music Productions/Opera including choreographers, directors, acting and musical performers and allied agencies.

¹ WIPO 2003, WIPO Guide on Surveying the Economic Contribution of the Copyright-based Industries

- ➤ Motion Picture and Video Industries include writers, directors, actors, production, distribution and exhibition, sales and rentals. Also included is the sub-sector of the Sound Recording Industry.
- ➤ Radio and Television including conventional radio and television broadcasting, cable distribution undertakings and Direct-to-Home (DTH) distribution services.
- ➤ Software, Databases and New Media including programming development and design, software and video games, database processing, web portals, on-line services and Internet Service Providers (ISPs).
- Advertising Services including advertising agencies, media buying services, public relations services, media representatives, display ads and direct mail services.
- ➤ Photography, Visual and Graphic Arts.
- > Copyright Collective Management Societies.

We have applied the standardized North American Industrial Classification System – or NAICS – to the above noted definitions for purposes of our data collection and analysis. Further, we have followed WIPO recommendations for those sector sub-categories that should be included in the analysis.

For these reasons, we have not included *Photography, Visual and Graphic Arts* in the findings of our Study. The relevant categories under *Photography, Visual and Graphic Arts* as Photographic Services (NAICS 54192) and Graphic Design Services (NAICS 54143). Statistics Canada was unable to provide reliable data for these subcategories alone, and it was our belief that NAICS 5414 and 5419 contained too many categories that are defined by WIPO as relevant to the Copyright Industries.

Data on *Copyright Collective Management Societies* is not available from Statistics Canada, and this category is therefore not included for purposes of the Study.

On occasion throughout the course of our Report, we include reference to 'non-core' Copyright Industries. WIPO definitions of these categories include:

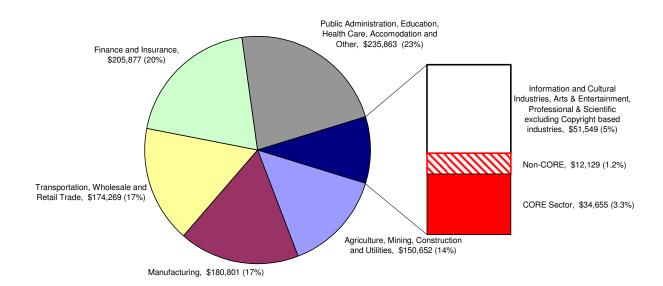
- ➤ Interdependent Copyright Industries including manufacture, wholesale and retail of television sets, radios, CD and DVD players, electronic game consoles, computers, musical instruments, blank recording material and paper.
- > Partial Copyright Industries including architecture, engineering and surveying, interior design, museums and furniture.
- > Non-dedicated Support Industries, including general wholesaling and retailing, general transportation, telephony and Internet.

Part I – The GDP/Value Added of Canada's Copyright Industries

To analyze the contribution of Canada's Copyright Industries to the Canadian economy as a whole, it is useful to first compare this sector with other sectors of the Canadian economy. As noted in Figure 1 below, Canada's *Information and Cultural Industries*, *Arts & Entertainment*, *Professional & Scientific* sector comprises **9.5 percent** of the Canadian economy. Core Copyright Industries comprise 3.3 percent of the Canadian economy, while non-core Copyright Industries comprise an additional 1.2 percent of the economy.

Figure 1

GDP - Copyright Based Industries in the Canadian Context (2004 - \$millions)



The economic performance of Copyright Industries in a comparative context in the 1997 to 2004 period is outlined in Figure 2 below. In a theme that is repeated throughout our findings, the 1998 to 1999 period indicates that the Copyright Industries outperformed all other sectors in the Canada economy, largely fuelled by the dotcom boom of the late 1990's, but have since 'normalized' to more closely pattern other sectors. The rate of growth in the core Copyright Industries slowed to 0.1 percent between 2003 and 2004 (see also Figure 6, page 23).

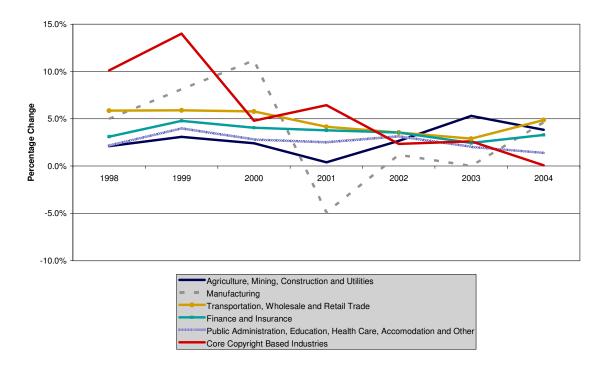


Figure 2

GDP Copyright Based Industries - Annual Growth by Sector

In general, the Copyright Industries have tended to outperform or be relatively consistent with the Canadian economy as a whole, as indicated in Figure 3. The exception is within the 2003 to 2004 period, when the Copyright Industries began to underperform the Canadian economy overall. However, as discussed later in our Report there are a number of reasons to believe that the current underperformance of the Copyright Industries with respect to the Canadian economy is *not likely* a trend that will continue.

In the period since 1997, Canada's Copyright Industries have shown a relatively steady combination of growth and stability, with a 'tailing off' evident in the 2003 to 2004 years. The total added value of Canada's Copyright Industries (core plus non-core) in 2004 – calculated in 1997 chained dollars – was approximately \$46.8 billion.²

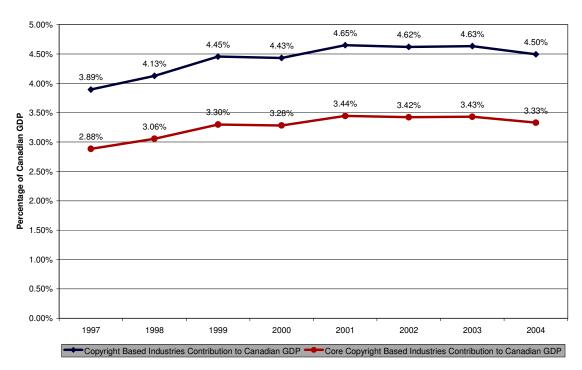
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² We have elected to apply '1997 chained dollars' as our base measure to maintain consistency with the 2004 Study on *The Economic Contribution of Copyright Industries to the Canadian Economy* by Wall Communications Inc.

As indicated in Figure 3 below, the value added contribution of Canada's Copyright Industries as a whole reached a peak of 4.65 percent in 2001, when the core Copyright Industries contributed 3.44 percent to the Canadian economy. It is interesting to note that the peak year for Canada's core Copyright Industries occurred two years *following* the dot-com boom of 1999.

Figure 3

GDP: Copyright Based Industries - Contribution to Canadian GDP



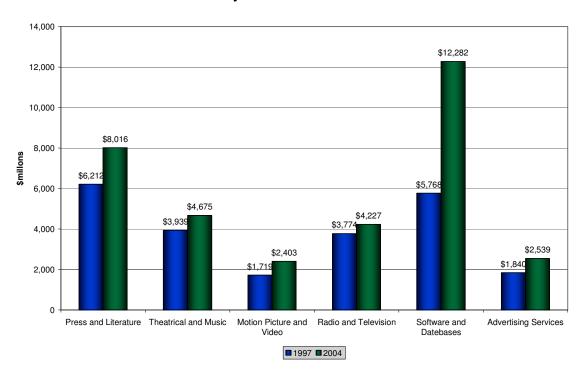
The 2004 breakdown of the value-added contribution of the Copyright Industries to the Canadian economy is outlined in Table 1 below. 'Cultural Industries' refers to the traditional content-creation elements of sectors such as *Press and Literature*, *Motion Picture and Video*, and *Radio and Television*. 'Non-cultural Industries' refers to certain activities in *Software and Databases* such as database processing and technical design.

Table 1			
Copyright Industries – Share of Canadian GDP (2004 - \$millions)			
\$19,834	1.9%		
\$14,821	1.4%		
\$34,655	3.3%		
<u>\$12,129</u>	1.2%		
\$46,784	<u>4.5%</u>		
\$1,040,779	100%		
	s – Share of Ca I - \$millions) \$19,834 \$14,821 \$34,655 \$12,129 \$46,784	s – Share of Canadian GDP 1 - \$millions) \$19,834	

Trends in the contribution of the Copyright Industries to Canadian GDP are further revealed when broken down by core sector growth over time. Figure 4 below outlines the contribution to GDP by sector, comparatively for the years 1997 and 2004.

Figure 4

GDP by Sector - 1997 and 2004



As outlined in Figure 4, each core sector in the Copyright Industries has shown growth – sometimes significant – in their respective contributions to GDP when 1997 is compared to 2004. Leading the way are the *Software and Database Industries*, which climbed from \$5.76 billion in 1997 to \$12.2 billion in 2004. *Press and Literature Industries* showed the next highest growth, rising from \$6.2 billion in 1997 to \$8.0 billion in 2004.

It is also possible to look at the impact of the specific core sectors on GDP by quantifying their respective annual growth rate between 1997 and 2004. Again, relative to the average annual growth of the Canadian economy at 3.5 percent, the core Copyright Industries grew at a faster rate of 5.7 percent. The sectors were lead by the *Software and Database Industries*, which grew at a rate of 11.4 percent between 1997 and 2004 as illustrated in Figure 5 below.

Only two sectors – *Radio and Television* and *Theatrical and Music* – demonstrated average annual growth that underperformed growth in the Canadian economy during the 1997 to 2004 period, signifying a general strength within the core Copyright Industries as a whole.

Figure 5

GDP Growth by Sector - 1997 to 2004

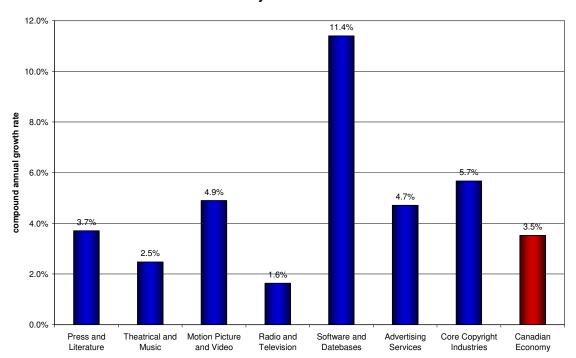


Figure 6 also clearly identifies the impact of the dot-com boom on the year over year growth of the Copyright Industries – peaking at 14 percent compound annual growth in 1999 – when compared to the year over year growth of the Canadian economy as a whole, which also peaked in 1999 at 5.6 percent.

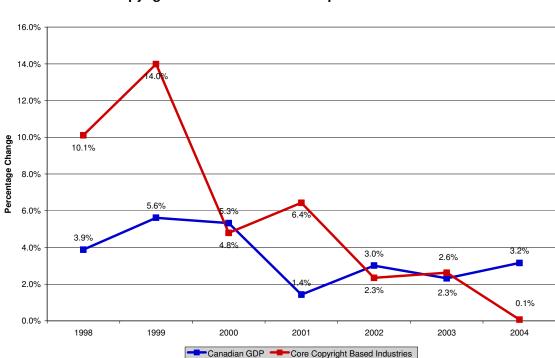


Figure 6

GDP Copyright Based Industries - Comparative Annual Growth

The impact of the *Software and Database Industries* on the trending of value added contribution by the Copyright Industries cannot be underestimated. This is further illustrated when we disaggregate *Software and Database Industries*, the other core Copyright Industries, and the Canadian economy as outlined in Figure 7 below.

It is also interesting to look at the contribution of the *Software and Database Industries* to GDP relative to the approximate performance of NASDAQ over the same timeframe. They clearly match in a push-and-pull illustration that demonstrates the clear influence of this sector in the GDP contribution of the core Copyright Industries overall (see Figure 8 below).

Figure 7

GDP Copyright Based Industries - Annual Growth Disaggregated

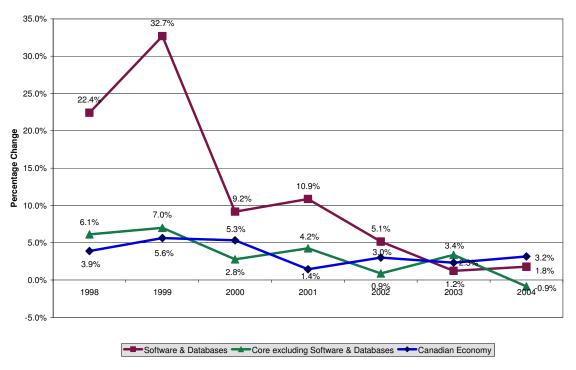
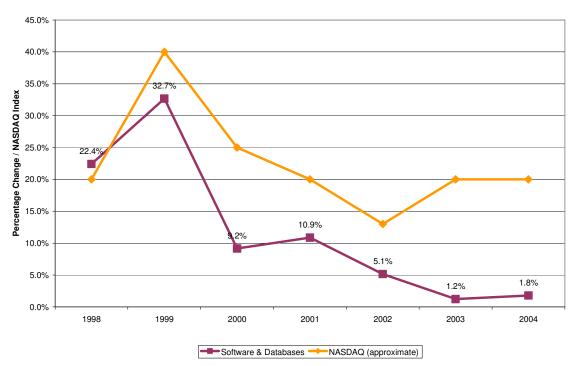


Figure 8

GDP Software and Databases - Correlation with NASDAQ



Discussion

The pattern of Canada's Copyright Industries has been relatively stable over the 1997 to 2004 period, only recently outperforming the Canadian economy as a whole. Steady growth was seen in the 1997 to 2002 period, with a leveling off evident in the 2003 and 2004 years.

Continuous growth in the Copyright Industries has been driven to an extent by the *Software and Database Industries*, which enjoyed spectacular growth with the dotcom boom of the late 1990's, but has since moved in to the relatively *cyclical* pattern of Canada's other Copyright Industries.

Most respondents reacted without surprise to the trending of Canada's Copyright Industries overall, voicing three key reasons for what is widely perceived as a 'soft' period of growth for these industries. Similar rationale is voiced throughout the course of our analysis of individual sectors.

First, technology has undergone extremely rapid forward progress in just the past two or three years, especially with respect to the advancement of personal mobile devices and related platforms for content distribution. Several respondents noted that the pace of technology has essentially outpaced the ability of some Copyright Industries to harness and leverage this technology – resulting in a 'wait and see' or cooling off period until certain technologies shake out in the marketplace and can be 'appropriately adapted' to industry needs.

The impact of technology on the Copyright Industries, their bottom line and their ability to grow cannot be underestimated. In every sector we examined, technology plays a fundamental role in the ability of the Copyright Industries to compete effectively in Canada, grow their sectors in international markets, and streamline costs while continuing to build economic sustainability.

Technology is in many ways the 'wild card' in the future economic performance of the Copyright Industries, in that its direction is nearly impossible to predict. But clearly, with the recent rapid deployment of new content platforms, Canada's Copyright Industries are taking a moment to assess the true impact and true promise of technological advancement as they make their business decisions going forward.

Second, while technology has moved forward with great speed in only the past few years, the skill sets required to keep pace with the ability of the Copyright Industries to exploit this technology has not. While many of the 'content-based' industries' respondent indicated some concern about their on-going ability to attract and retain technology-proficient employees, nowhere was this voiced more

strongly that by the *Software and Database Industries*. While we explore this in a separate section on this sector below, it is true that many respondents view the availability of technology skills as fundamental to future success.

Third, many of the respondents representing the Copyright Industries stated quite bluntly that access to capital has become even more difficult to achieve than in years past. Although the profit margins of many Copyright Industries are not sufficient to attract venture capital, the reluctance of financial institutions to provide seed or other funding to Copyright Industry initiatives is viewed by many as worsening.

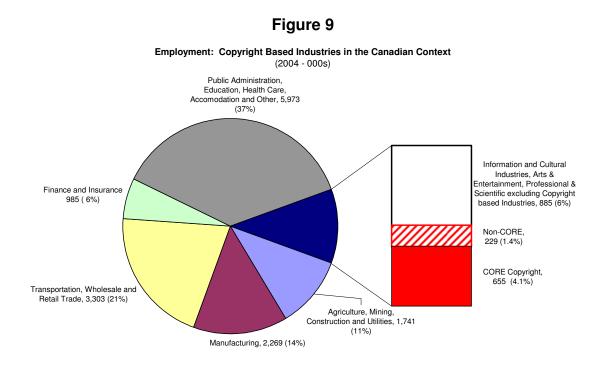
The reason: there is a general perception that the Copyright Industries – given their basis in content development and distribution – are not well understood in the financial community and viewed by investors as 'soft, cultural' industries rather than experienced and savvy businesses. The issue of access to capital is also explored in greater detail as we examine the individual sectors below.

In combination, rapid technological change and uncertainty on how to manage this, the availability of requisite skills sets and perceived limitations on access to capital are viewed as fundamentally slowing the contribution of the Copyright Industries to the Canadian economy. Respondents were also clear in their views that the Copyright Industries tend to be cyclical in their financial performance, and the currently 'soft' performance levels would not persist.

Part II – Employment in Canada's Copyright Industries

Canada's core Copyright Industries employed just over 655,000 people in 2004, or 4.11 percent of total Canadian employment. Approximately 219,000 people were employed in non-core Copyright Industries in 2004; together, the Copyright Industries represented 5.55 percent of total Canadian employment in 2004.

Total employment in the Copyright Industries compared to other sectors of the Canadian economy is illustrated in Figure 9 below.



As further illustrated in Figure 10 below, employment in the Copyright Industries has remained relatively stable over the 1997 to 2004 period, peaking at 5.8 percent of overall employment in 2001. Similar to the peak contribution to GDP by the Copyright Industries, contribution to employment peaked two years *following* the 1999 dot-com boom. Once again, the evidence suggests that the Copyright Industries demonstrated some economic resilience when the dot-com bubble burst.

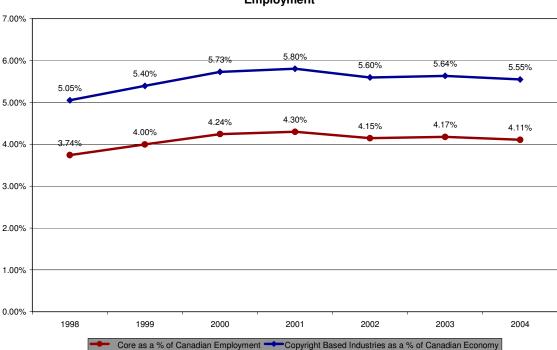


Figure 10

Employment: Copyright Based Industries - Contribution to Canadian Employment

Trends in the contribution of the Copyright Industries to Canadian employment are further revealed when broken down by core sector growth over time. Figure 11 below outlines employment trends by sector, comparatively for the years 1997 and 2004.

As outlined in Figure 11, each core sector in the Copyright Industries has shown growth in sector employment when 1997 is compared to 2004. Once again, the *Software and Database Industries* lead all sectors in employment growth, increasing by nearly 100,000 by 2004. The *Press and Literature Industries* and *Radio and Television Industries* showed the most modest employment increases of the core sectors, but all sectors in the core Copyright Industries demonstrated growth in the period analyzed.

Employment growth in the core Copyright Industries can also be illustrated by sector, comparatively with Canada as a whole. As Figure 12 illustrates, most of the core Copyright Industries outperformed the 2.2 percent job growth in the Canadian economy as whole for the 1997 to 2004 period. Only *Press and Literature* and *Radio and Television* underperformed job growth in the Canadian economy.

Figure 11
Employment by Sector - 1997 and 2004

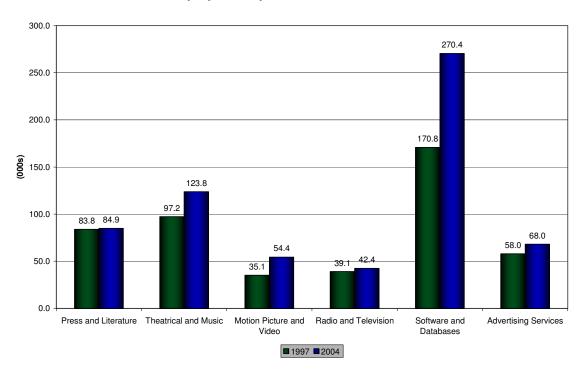
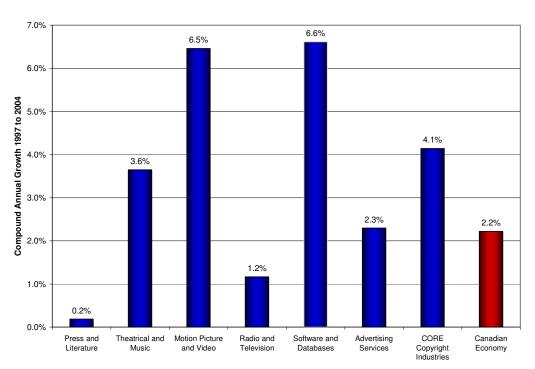


Figure 12
Compound Annual Growth by Sector: 1997 to 2004



Similar to the trend evident in the value-added contribution of the Copyright Industries to the Canadian economy (Figure 4 above), employment trends in the Copyright Industries are also cyclical when compared against the employment trend in the Canadian economy overall as described in Figure 13 below.

Figure 13

Employment Copyright Based Industries - Comparative Annual Growth

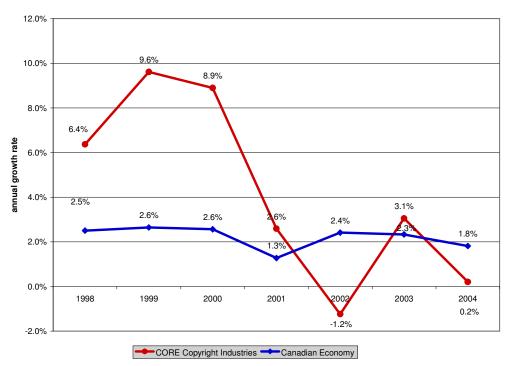
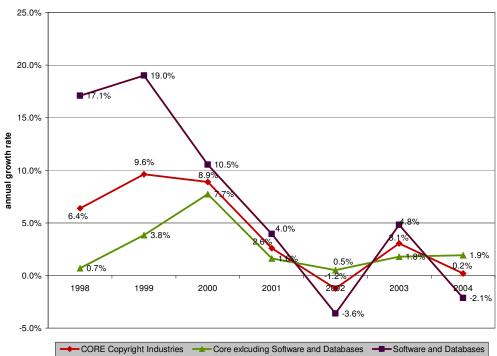


Figure 13 also illustrates the impact of the dot-com boom in the employment levels within the Copyright Industries, which reached a peak of 9.6 percent in 1999 at the height of the boom. Despite the cooling off period after 1999, however the Copyright Industries outperformed the Canadian economy in terms of annual employment rate growth in all years except 2002 and 2004.

The impact of the *Software and Database Industries* in employment trends within the Copyright Industries can be further illustrated by disaggregating *Software and Databases* and by mapping this sector against the annual growth rate in the NASDAQ Index (for the 1992 to 2004 period) as demonstrated in Figures 14 and 15 below.

Figure 14

Employment Copyright Based Industries - Annual Growth Disaggregated



Once again, the push-pull effect of the *Software and Database Industries* can be seen in Figure 15 as the sector cycles through the 1997 to 2004 timeframe.

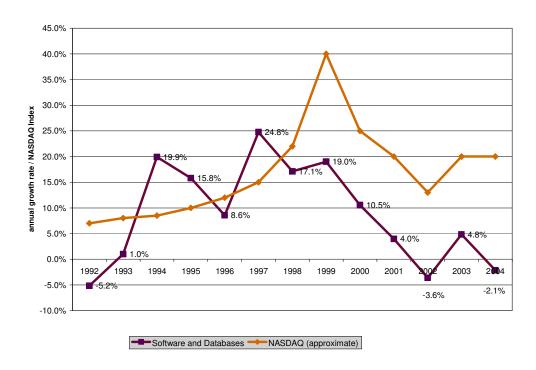


Figure 15

Employment Software and Databases - Correlation with NASDAQ 1992 to 2004

Discussion

The contribution of Canada's Copyright Industries to employment has – like the value-added contribution of the Copyright Industries – been relatively stable over the 1997 to 2004 period. Figure 6 (GDP Copyright Industries Compared to Canadian GDP) and Figure 13 (Employment Copyright Industries Compared to Canadian Employment) are particularly important to the analysis of trends, as each pattern indicates (i) more *cyclical* behaviour in the marketplace and (ii) a relative *cooling off* in the 2003 to 2004 timeframe.

Our analysis of employment trends in the Copyright Industries is closely aligned with our analysis of the value-added contribution of the Copyright Industries to the Canadian economy overall. Technology, skills sets and access to capital have fundamental impacts on the bottom line of the Copyright Industries individually and in the aggregate.

For example, the 'wait and see' perspective of respondents concerning rapid technology advancement clearly impacts economic growth, and therefore impacts employment growth as well. Similarly, difficulties in achieving access to capital can inhibit industry growth and larger employment numbers, which become more

a function of factors relating to the marketplace and competition on a sector-bysector basis.

Discussions of employment patterns with respondents generally focused on issues relating to technology skills and the availability of sufficiently skilled Canadians for the Copyright Industries going forward. While the issue of skills was not generally seen as a concern on the *content* side of the Copyright Industries – with a prevailing view that there will be a continuous pool of actors, writers, editors, managers and other content-related skills – the view on available advanced technology skills was seen as a potential inhibitor to industry growth going forward.

Once again, the strongest concern about the current and future availability of skills was voiced by the *Software and Database Industries* and is discussed in a separate section below. At the same time, as noted in our analysis of the value-added contribution of the Copyright Industries to the Canadian economy, respondents were clear in their perspective that the Copyright Industries tend to be 'mature' sectors of the economy, and as such take on more cyclical financial performance. The current 'softness' in both value-added contributions and employment growth is not expected by respondents to persist.

Part III – Trade in Canada's Copyright Industries

The estimates included in this part of our Report use the value of *domestic exports* and *retained imports* rather than the values of total exports and total imports. Calculations of domestic exports and retained imports are determined by deducting the value of re-exports from both sides of the total, i.e. exports are those that originate in Canada and imports are those retained in Canada.

To analyze the balance of trade in the Copyright Industries, we identified a number of sectors and sub-sectors per NAICS classifications to achieve a stronger sense of those sectors that might be approaching a greater balance between domestic exports and retained imports. There is little doubt that given the proximity of Canada to the United States and the massive volume of cultural goods imported by Canada, we remain a net importer of Copyright Industries goods.

As noted in Table 2 below, Canada exported \$5.1 billion in Copyright Industry products and services in 2004 while importing \$8.3 billion. This is an increase from 2003 when exports totaled \$4.6 billion while imports remained relatively steady.

Table 2 Imports and Exports – Core Industries in the Canadian Context				
2004 - \$millions				
	<u>Canada</u>	Core Sectors		
Imports Exports	\$437,566 <u>\$490,950</u>	\$8,263 (1.9%) <u>\$5,103</u> (1.0%)		
Trade Balance	<u>\$53,384</u>	<u>(\$3,160)</u>		

The question is whether the gap between exports and imports is increasing or growing larger in the Copyright Industries. Figures 16 and 17 below present the current balance of trade in selected Copyright Industries and sub-sectors for 2004. As illustrated, *Written and Published Works* strongly influence Canada's overall trade balance in the Copyright Industries at a trade deficit of \$1.9 billion. *Software Royalty Payments* and *Advertising* maintain the strongest trade surplus at \$317 million and \$242.4 million respectively.

Figure 16
Imports & Exports by Sector 2004 - Page 1 of 2

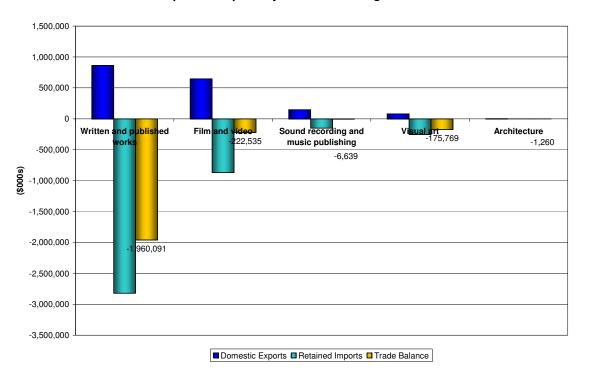
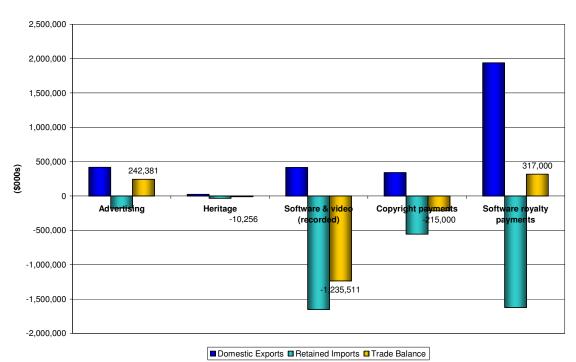


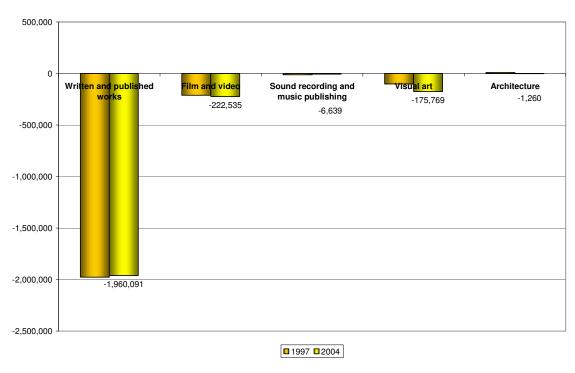
Figure 17
Imports & Exports by Sector 2004 - Page 2 of 2



The balance of trade by sector and sub-sector can also be analyzed for the 1997 to 2004 period, as demonstrated in Figures 18 and 19 below. With the exception of increased trade surpluses in the *Advertising* and *Software* sectors, the balance of trade has remained relatively stable with slight increases in trade deficits in selected sectors and sub-sectors over the 1997 to 2004 period.³

Figure 18

Trade Balance by Sector 1997 and 2004 - Page 1 of 2



³ 'Software Royalty Payments' refer to payments made to rights holders (authors) of software products and platforms, such as video games, business/accounting software and CD-ROMs. 'Copyright Royalty Payments' refer to payments made to rights holders (authors) of published works such as films, novels, songs, etc.

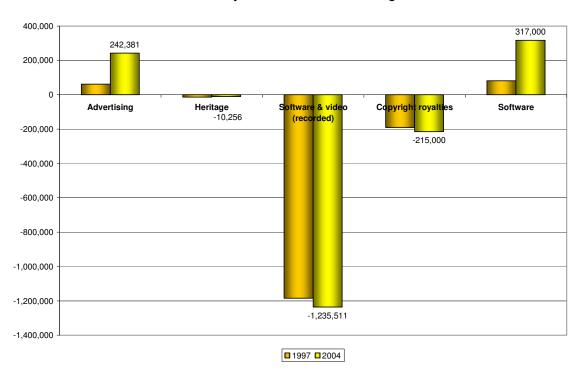


Figure 19

Trade Balance by Sector 1997 and 2004 - Page 2 of 2

When analyzed over the 1997 to 2004 period, the trade deficit of the Copyright Industries can be viewed as shrinking by a small percentage between 1997 and 2002 – from \$3.5 billion to \$3.2 billion – and remaining stable between 2003 and 2004 (Figure 20).

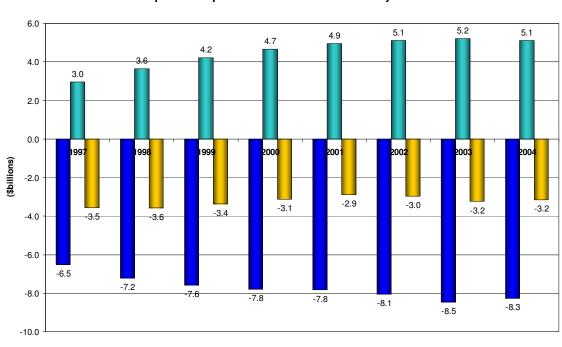


Figure 20
Imports & Exports - Total for Core Sectors by Year

It is also interesting to note certain changes that occurred in the export of 'cultural goods' between 2003 and 2004. While *Film and Video* together with *Heritage* demonstrated healthy export gains, *Written and Published Works*, *Sound Recording* and *Advertising* showed export reductions.

■ Retained Imports ■ Domestic Exports ■ Trade Balance

Т	able 3	
Exports of Selection 2003 and 2	ted Cultural Pro 2004 (\$millions)	oducts
	<u>2003</u>	<u>2004</u>
Film and Video	\$618,302	\$644,945
Written/Published Works	\$940,422	\$862,730
Sound Recording	\$155,069	\$145,072
Heritage	\$ 18,479	\$ 24,103
Advertising	\$440,491	\$417,915

As noted earlier in our Report, export totals in the Copyright Industries reached \$5.1 billion in 2004 compared with \$4.6 billion in 2003.

Discussion

Respondents in the qualitative part of our research were clearly aware – as Copyright Industry professionals and leaders – that Canada is essentially 'holding its own' so far a the balance of trade in largely content-based industries are concerned. The fact that the trade deficit in the Copyright Industries has eased even slightly – driven to an extent by strong export sectors in *Advertising* and *Software* – means that while we are still a nation of importers, the United States remains a core export destination for the products of Canada's Copyright Industries.

Respondents further suggested that the slowing of the import/export ratio (illustrated in Figure 21 above) is linked to the 'soft' period of growth in value-added contribution and employment contribution to the Canadian economy that we have now entered. But there were cautionary notes from most respondents that (i) balance of trade is structural and given our proximity to the U.S., difficult to shrink in terms of deficit and (ii) a healthier export sector in the Copyright Industries is mandatory to improve the balance of trade overall.

However, penetrating international markets remains a challenge for many of the Copyright Industries, since products are often 'domestic' (e.g. Canadian cultural content) in nature and potential investment in the Copyright Industries tends to be oriented to growth in the domestic market as opposed to international territories.

Part IV – Analysis of Canada's Core Copyright Industries by Sector

In this part of our Report, we analyze by turn those core Copyright Industry sectors for which we received reliable data from Statistics Canada: *Press and Literature; Theatrical and Music Production/Opera; Motion Picture and Video; Radio and Television; Software and Databases;* and *Advertising Services*.

For each of these sectors we present illustrations of (i) their value-added contribution to the Canadian economy, (ii) their employment contribution to the Canadian economy and (iii) a breakdown of employment by province. Our accompanying discussion/analysis of each sector is based on the qualitative research carried out in completing the Study and on any accompanying secondary research as noted.

<u>A – Press and Literature</u>

As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Press and Literature Industries* include authors, writers, translators, newspapers, magazines, book publishing, music publishing, software publishing and libraries.

With respect to the value-added contribution of the *Press and Literature Industries* to the Canadian economy, the data indicate a period of growth from 1997 to 2001, stability in 2002 and 2003, and a slight decline or 'softening' from 2003 to 2004.

Figures 21 and 22 illustrate the trend in value-added contribution to the Canadian economy by the *Press and Literature Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively.

Figure 21

GDP - Press and Literature

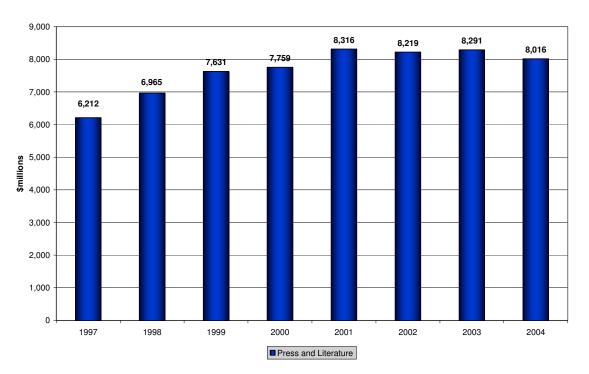
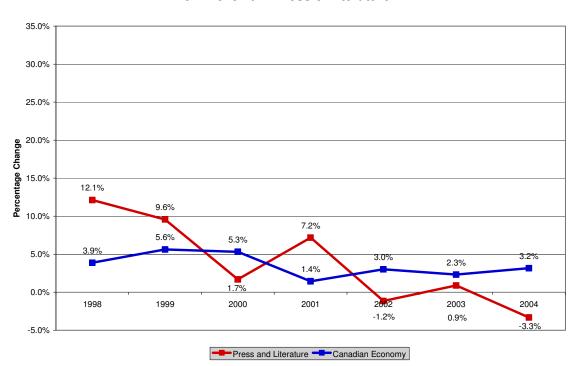


Figure 22

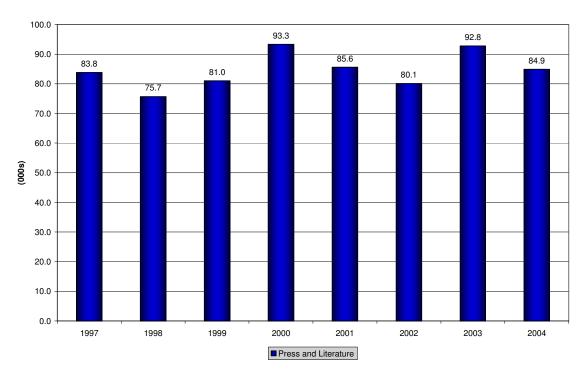
GDP Growth - Press & Literature



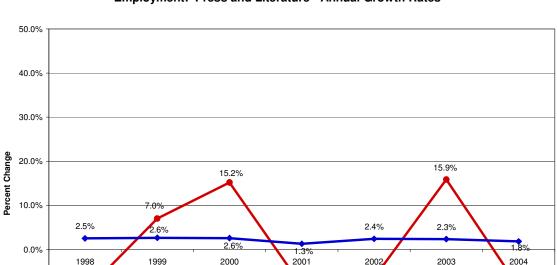
As noted in Figure 22, the *Press and Literature Industries* are a mature core Copyright Industry, and as such show cyclical trending over time. However, the sector underperformed the Canadian economy between 2002 and 2004; this was due – at least in part – to the major influences of technology on business models in the book and magazine publishing sectors.

Consequently, employment rates and growth in the *Press and Literature Industries* follow a similar pattern of economic performance, as demonstrated in Figures 23 and 24 below.

Figure 23
Employment - Press and Literature



-8.5%



-8.3%

Press and Literature ——Canadian Economy

-6.4%

Figure 24

Employment: Press and Literature - Annual Growth Rates

Figure 25 outlines the relative share of employment in the *Press and Literature Industries*, by province. As illustrated, British Columbia has the largest share at 133 percent, followed by Ontario at 117 percent and Manitoba at 91 percent. It is somewhat surprising that Quebec's share is 78 percent, given the strong Frenchlanguage publishing sector in the province. Atlantic Canada has the lowest share overall, at 70 percent. The share of employment in British Columbia is higher than anticipated and may merit further research on the reasons for this distribution.

-10.0%

-20.0%

-9.7%

⁴ To interpret this graph, Canada is identified as having the national average of employment at 100 percent. The provincial percentages identify the share of employment in this industry relative to the national

average. Quebec would be viewed as having the highest proportional share, and British Columbia would be viewed as having the lowest.

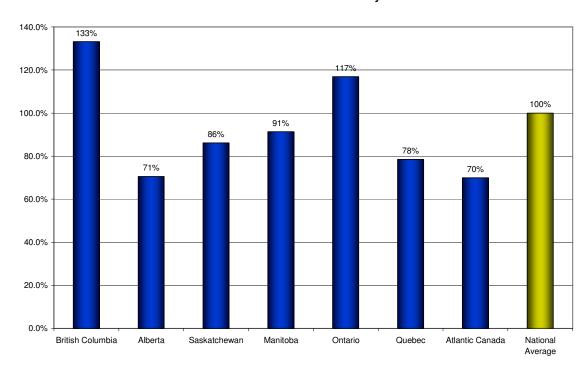


Figure 25

Press and Literature - Relative Share by Province

Discussion

Respondents noted that the *Press and Literature Industries* are mature Copyright Industries that show long term cyclical trending in the economy. The recent 'softening' of value-added contributions to the economy and employment levels in the industries are viewed with concern, but not necessarily as long term. That stated, respondents noted a number of reasons for the recent economic performance of the industries.

First – especially in the case of book publishers and magazine publishers – access to capital investment is extremely difficult to acquire, in part because investors show little interest in the low profit margins of these industries. At the same time, industry respondents noted that reductions to traditional funding programs (e.g. the Publishers Assistance Programs for magazines) and uncertainty as to the future funding of Canada Council allocations continue to place financial pressure on the sector.

The book publishing sector also experienced structural change in the supply chain, with the merger of Indigo and Chapters in 2001; the company controls the majority of the Canadian book retail market. The merger also resulted in some store closures, which in combination with the collapse of General Distribution Ltd

resulted in a high volume of returns to publishers that directly affected their bottom line.

With respect to the magazine and newspaper sectors, both are highly dependent on advertising revenue for financial sustainability and competitive strength, noting that the Canadian government has not yet resolved the status of Direct to Consumer (DTC) pharmaceutical advertising, even though such advertising is readily available to Canadian consumers through their U.S. competition and other media sectors. Access to DTC advertising of pharmaceuticals is viewed as a potentially major revenue stream for both sectors.

At the same time, the magazine industry continues to be pressured by the costs of postal rates charged for distribution to subscribers. Book publishing respondents also raised the question of determining the value of digital book rights as a future economic underpinning of the industry.

Second, *technology* is viewed by respondents as fundamentally changing traditional business models in book and magazine publishing. The development of digital platforms for content development and distribution can offer consumers choice and variety, but can also require massive investment by content producers.

For example, book publishers are faced with the need to produce copies of products in print, digital and (often) audio/alternate formats, and the growth of Personal Audio Devices such as iPods is pressuring publishers to produce more audio-based materials.

Moreover, the book publishing distribution system is dependent on the input of extensive bibliographic information – required to secure discounts from retailers – that require significant human resources to input.

Respondents from the Canadian magazine sector indicated that digital periodicals have not yet gained a foothold in the Canadian marketplace, but the strength of magazine branding may move content to alternate platforms as consumers indicate their preferences to the industry.

Respondents from the newspaper industry indicated that technology is increasingly beneficial to that industry's bottom line, as new revenue streams become available from on-line editions of newspapers available only through subscription. In addition, technology advancements have allowed cost savings through the decentralization of production, as editorial and production arms of newspapers need no longer be under the same roof.

Third, *competition* from foreign books and magazines is inordinately high for both these sectors. For example, some 250,000 books were published globally in the English language in 2005, a volume much higher than the average store can handle – but effectively reducing the shelf life of a book to as little as six weeks. This means that publishers must face inordinately high returns from retailers as stock continues to cycle through stores.

At the same time, the newspaper industry is not so much faced with foreign competition as a changing domestic revenue model driven by 'free commuter' newspapers in larger markets.

Fourth, *marketing and promotion* costs tend to run very high in the publishing industry; book publishing respondents estimate marketing costs to run at \$1 per book printed. A small press run equates to a very small marketing budget, although Canadian publishers continue to be extremely aggressive in the international marketing and distribution of Canadian titles. Magazine publishing respondents indicated that direct marketing to consumers is a mainstay of their business model, noting that U.S.-based magazine publishers have been captured by the national 'do not call' telemarketing restrictions.

Fifth, *consolidation* in the book publishing industry has created some mid-size firms and economic strength in the sector, but those mid-size firms quickly find themselves in competition with the much larger major multinationals. The book publishing industry continues to express concern about the 'succession' issue, i.e. the continued ownership and management of companies by second and third generations of families.

For their part, educational publishers are finding themselves more aligned and even housed within universities and colleges, a trend that respondents view as likely to grow over time.

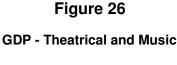
Consolidation has also taken place in the magazine industry, and is expected to continue at some level as smaller firms are taken over by other companies, creating more mid-size players.

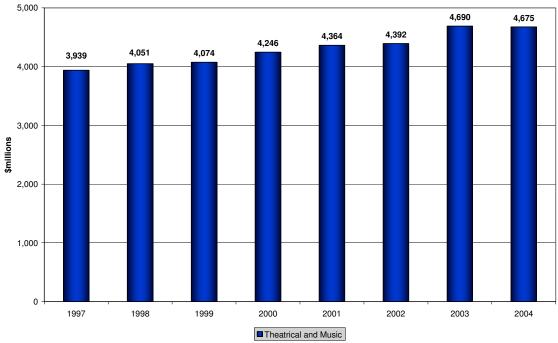
<u>B – Theatrical and Music Production/Opera</u>

As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Theatrical and Music Industries* include choreographers, directors, acting and musical performers and allied agencies.

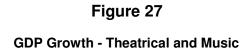
With respect to the value-added contribution of the *Theatrical and Music Production/Opera Industries* to the Canadian economy, the data indicate a steady period of growth from 1997 to 2003 with a very slight decline in 2004. As discussed below, this pattern is likely due to (i) continuing challenges in accessing capital and on-going dependency on Canada Council funding, (ii) municipal nosmoking by-laws that have potentially reduced attendance at some venues over the short term, and (iii) the impact of technologies that can increase the costs of production while augmenting marketing and other business strategies.

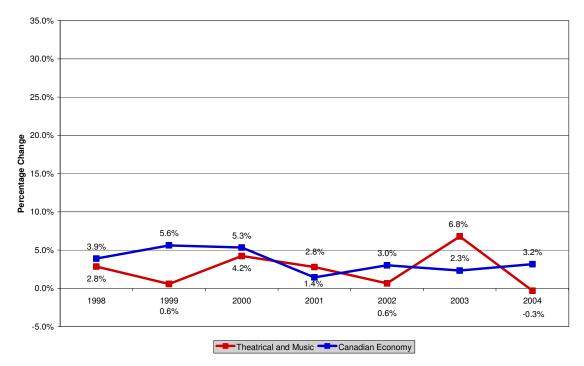
Figures 26 and 27 illustrate the trend in value-added contribution to the Canadian economy by the *Theatrical and Music Production/Opera Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively.





As noted in Figure 27, the *Theatrical and Music Production/Opera Industries* are also cyclical, but generally underperform the Canadian economy in terms of GDP growth in the period from 1997 to 2004.





At the same time employment rates and growth in the *Theatrical and Music Production/Opera Industries* follow a similar 'wave' pattern of performance as illustrated in Figures 28 and 29 below.

Figure 28

Employment - Theatrical and Music

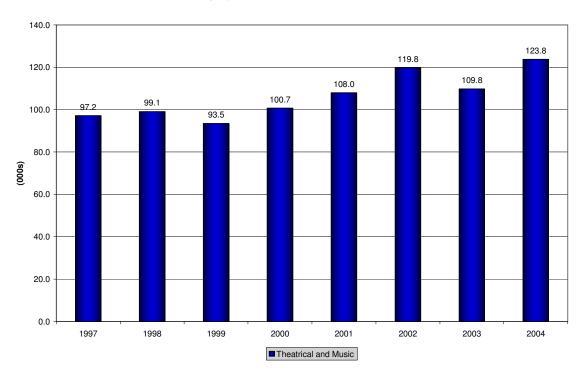


Figure 29

Employment: Theatrical and Music - Annual Growth Rates

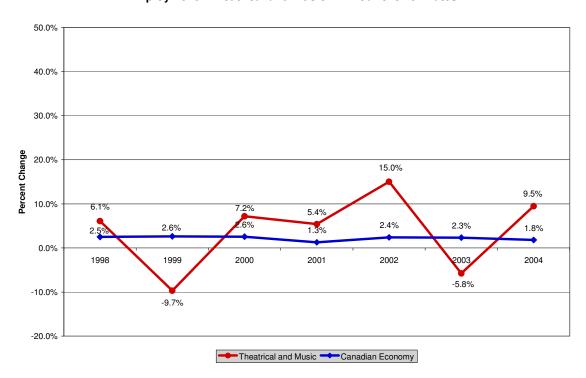
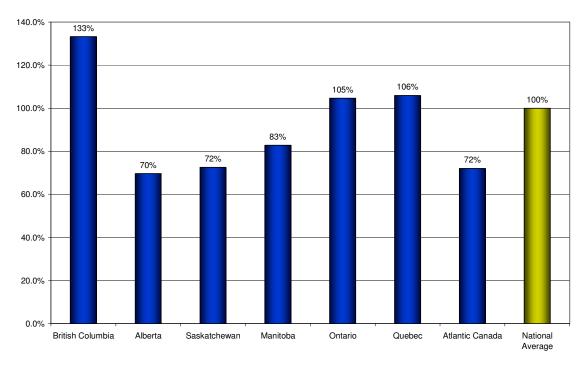


Figure 30 below outlines the relative share of employment in the *Theatrical and Music Production/Opera Industries*, by province. As illustrated, British Columbia has the largest share of employment in these industries at 133 percent, followed by Quebec at 106 percent and Ontario at 105 percent. Alberta has the lowest relative share of employment at 70 percent. Once again, the distribution of employment in this sector raises additional research questions, including the relative prevalence of British Columbia and lower showing by Alberta.

Figure 30

Theatrical and Music - Relative Share by Province



Discussion

The performing arts – theatre, opera, music performances – tend to demonstrate soft cycles of value-added and employment contribution to the Canadian economy. Respondents generally highlight a number of factors driving this trend.

First, performing arts groups tend to be dependent on Canada Council and related sources of public funding for core financial support. Similar to the situation of other cultural sectors in the Copyright Industries, this sector has difficulty acquiring access to capital due to very low profit margins. While Canada Council

funding was doubled by the previous government in November 2004, long term sustainable funding remains a core issue for this sector.

Second, this sector also includes venues such as theatres, nightclubs and other establishments subject to municipal by-laws on smoking. Subsequent, if temporary, reductions in venue attendance are viewed by respondents as contributing to the flattening of financial performance in the sector.

Third, technology has both added costs and enabled efficiencies within this sector. For example, complex staging, software-based lighting and sound can improve performance quality and potentially improve paid attendance, but can be costly to implement and maintain. At the same time however, technology has also allowed for more sophisticated marketing and promotion of the performing arts.

Skills do not appear to be an issue in this sector, nor is there any expectation of large-scale consolidation in the next three- to five-year period.

C – *Motion Picture and Video*

As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Motion Picture and Video Industries* include writers, directors, actors, production, distribution and exhibition, sales and rentals. Also included is the sub-sector of the *Sound Recording Industry*, with the exception of music publishing; we note that the *Sound Recording Industry* is analyzed separately later in our Report. With respect to the value-added contribution of the *Motion Picture and Video Industries* to the Canadian economy, the data indicate a period of steady, regular growth from 1997 to 2003, with a slight 'softening' occurring in 2004.

Figures 31 and 32 illustrate the trend in value-added contribution to the Canadian economy by the *Motion Picture and Video Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively. This pattern is most clearly identified with the increase in service production (i.e. Canadian locations and crews) for Hollywood films, with a softening in 2004 due in part to incentives from American states to keep film production 'at home'. Changes to the Canadian Television Fund have also driven more production companies toward made-for-television movies, and away from theatrical releases.

Figure 31

GDP - Motion Picture and Video

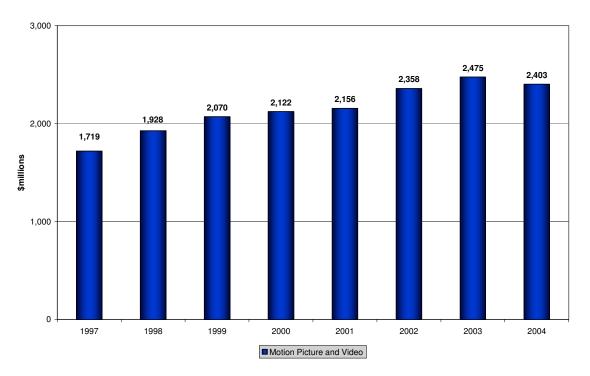
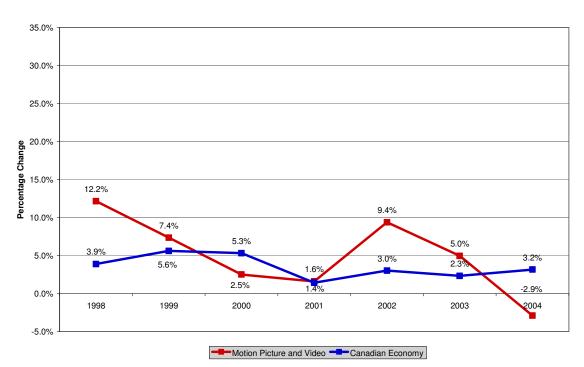


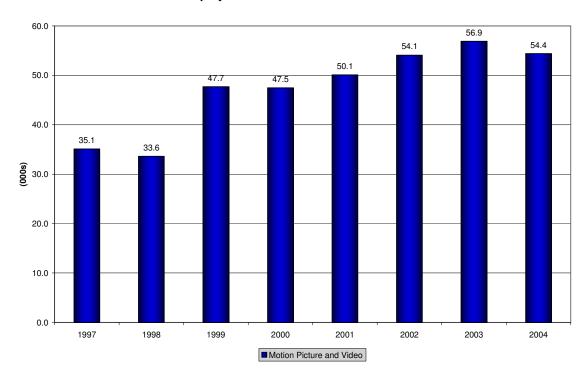
Figure 32

GDP Growth - Motion Picture and Video



Employment in the *Motion Picture and Video Industries* also shows fairly steady growth through the 1997 to 2004 period, with a slight tailing off in 2004. As illustrated in Figures 33 and 34 below, the *Motion Picture and Video Industries* tend to outperform or almost match the Canadian economy in terms of job growth. The 'spike' in job growth noted in the late 1990's is due in part to the influx and growth in service employment in the British Columbia film industry and the expansion of the broadcasting industry which generated the need for more Canadian programming.

Figure 33
Employment - Motion Picture and Video



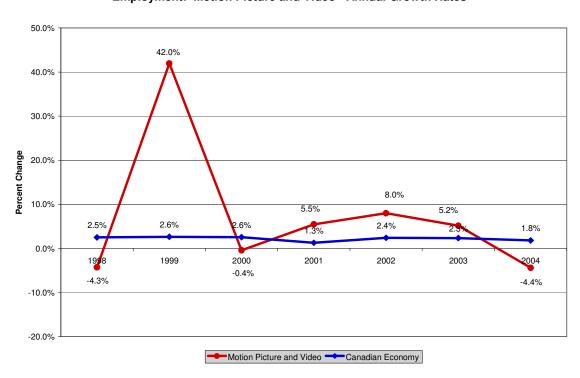


Figure 34

Employment: Motion Picture and Video - Annual Growth Rates

Figure 35 below outlines the relative share of employment in the *Motion Picture* and *Video Industries*, by province. It is no surprise that British Columbia has a commanding share of employment in this sector at 152 percent, followed by Ontario and Quebec each at 104 percent. Saskatchewan and Atlantic Canada have the lowest share of employment for 2004 at 49 percent each. Based on the available evidence, this is the third core Copyright Industry that has British Columbia with the highest relative share of national employment: *Press and Literature*, *Theatrical and Music Production/Opera*, and *Motion Picture and Video*. As noted earlier in our Report, this trend of employment activity in British Columbia may warrant further research as to the reasons for this pattern.

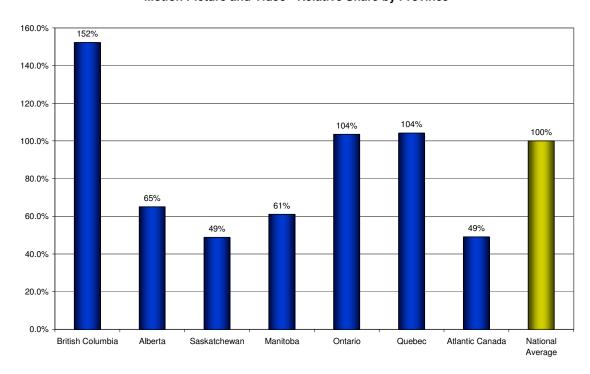


Figure 35

Motion Picture and Video - Relative Share by Province

Discussion

Access to capital is ranked as the number one issue by respondents from the *Motion Picture and Video Industries*; once again, respondents noted that the investment community tends to be dissuaded by the low profitability of the sector and tends to lack understanding about the value of rights ownership.

Difficulties in accessing capital have also been exacerbated by changes in access to export markets by television programming and feature film producers. Although the sector has traditionally seen success in export markets, emphasis on domestic productions within foreign territories is narrowing the market for Canadian produced television programming and feature films (especially in the Englishlanguage). This is seen in turn as putting more pressure on profits and an even greater need for (and increased difficulty in accessing) capital.

International markets also tend to have more 'shelf space' for content through increases in the number of television channels, but Canadian producers lack the resources to leverage this opportunity. At the same time, the importance of accessing internationally-based financing for productions is growing, especially for the service production industry in British Columbia.

The sector has also undergone some structural change in recent years, with the departure of major television programming producers such as Alliance Atlantis and growth in the number of medium and small companies. Once again, the presence of a large number of smaller firms does not tend to support access to financing.

Respondents also expressed concern with a perceived public policy gap with respect to production financing, where the bulk of funding only becomes available at the back end of a production instead of during production itself. Available envelops of public funding are also viewed as more favourable to television programming production than feature film production; this in turn is pushing the Canadian feature film sector toward a stronger service orientation (e.g. production services and film crews for U.S. features shot in Canada).

Technology has also impacted the *Motion Picture and Video Industries* through the development of new platforms for content delivery and a consequent lowering of cost to market/competitive entry (e.g. through the use of digital video production). This trend in digital production is viewed as growing stronger over time, and potentially expanding the industry's export capacity.

Technology is also affecting the production of programming for television in High Definition. The costs of producing dramatic programming for HD are higher (notably for dramatic programming), but the need for HD programming is growing both domestically and for export markets.

Skills development is also seen as a high priority for the industry. While the pool of talent is generally strong, there is concern over its long term sustainability without more post-secondary training opportunities and more industry-based internship and mentorship opportunities.

Respondents also raised the need for determining ownership of digital rights for content through copyright legislation, since this is currently unclear and could potentially draw additional revenues to the sector.

Consolidation in the industry is viewed as unlikely to take place, but partnerships and alliances will continue to be formed to take advantage of domestic and international opportunities. The availability of public subsidies also has the effect of maintaining the presence of smaller players in the industry.

Respondents noted that the future economic health of the *Motion Picture and Video Industries* is largely dependent on harnessing the opportunities of digital technology, developing a sustainable business model for the digital era and

successfully changing popular perceptions about the nature of content (i.e. not free) and the nature of rights.

D – Radio and Television

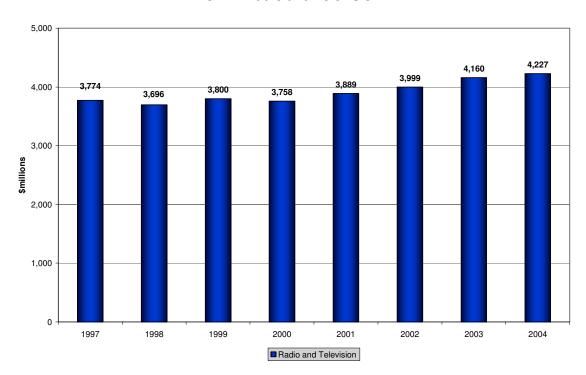
As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Radio and Television Industries* includes conventional radio and television broadcasting, cable distribution undertakings, and Direct-to-Home (DTH) distribution services.

With respect to the value-added contribution of the *Radio and Television Industries* to the Canadian economy, the data indicate a very stable period of economic performance between 1997 and 2004, with a steady trend of modest increase between 2001 and 2004. Unlike many of the other Copyright Industries analyzed for purposes of this Study, the *Radio and Television Industries* do not indicate a 'softening' in 2004, possibly due to the increasing uptake of digital television services by Canadian consumers.

Figures 36 and 37 illustrate the trend in value-added contribution to the Canadian economy by the *Radio and Television Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively.

Figure 36

GDP - Radio and Television



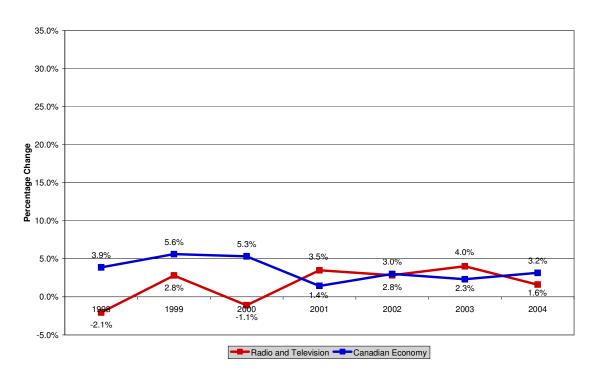


Figure 37
GDP Growth - Radio and Television

As demonstrated by the evidence presented in Figure 38, the *Radio and Television Industries* are a mature core Copyright Industry in Canada, and as such show cyclical trending over time. Although the sector has outperformed the Canadian economy twice in the past seven years (2001 and 2004), the industry closely tracks with the Canadian economy for each year analyzed.

Consequently, employment rates and growth in the *Radio and Television Industries* follow a similar pattern of economic performance, as demonstrated in Figures 38 and 39 below.

Figure 38

Employment - Radio and Television

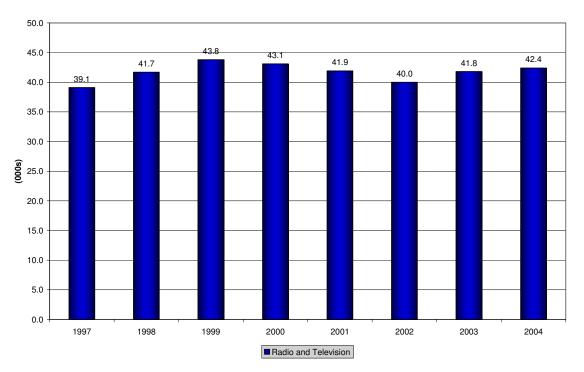


Figure 39

Employment: Radio and Television - Annual Growth Rates

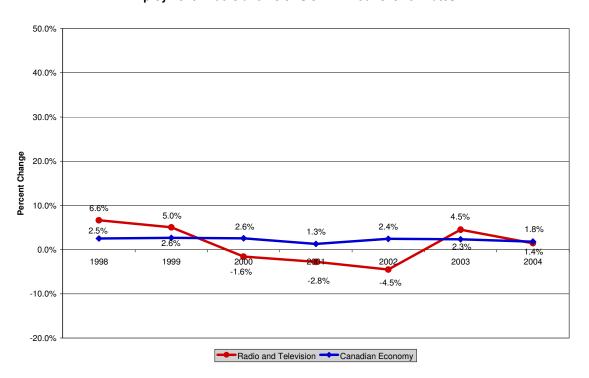
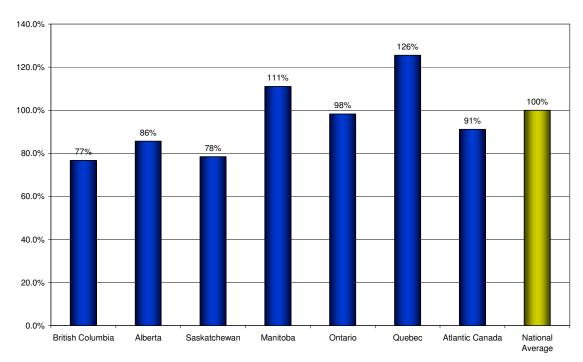


Figure 40 outlines the relative share of employment in the *Radio and Television Industries*, by province. As illustrated, Quebec has the largest share of employment at 126 percent, followed by Manitoba at 111 percent and Ontario at 98 percent. British Columbia has the lowest share of employment, at 77 percent. Manitoba's share of employment is especially interesting, and likely due to the presence of CanWest Global, one of only two national private television networks in Canada.

Figure 40

Radio and Television - Relative Share by Province



Discussion

The *Radio and Television Industries* are currently undergoing a major transformation in their traditional business models, owing to several factors as indicated by respondents.

First, the pace of technology and development of new/unregulated platforms for content distribution is forcing the sector to re-examine its traditional advertising-based revenue models. As an example of this on the television side, the expansion

of advertising revenue from such sources as Direct to Consumer advertising of pharmaceutical products is seen as important but other (new or revisited) sources of revenue are being explored – such as payment from Broadcasting Distribution Undertakings (BDUs) for the distribution of broadcasting signals.

Second – and related to the above – increasing fragmentation of content services in the marketplace is likely to have a major impact on the industry's economic performance in the years ahead. Streaming video over the Internet, peer to peer file sharing, personal communications devices such as cell phones and audio/video iPods are drawing viewers and listeners (and hence, advertising revenues) away from conventional broadcasters as content offerings expand on these alternative platforms.

As a particular concern of the specialty & pay television services arm of the *Radio* and *Television Industries*, the business model associated with a strong analog system will migrate to a digital system (under a CRTC policy framework) by 2013. That is, a market penetration rate of 65 to 90 percent may drop dramatically in a digital system based on a personalized model of à la carte services. The expectation is that this will lead to fewer viewers, lower access by advertisers to viewers, and subsequently lower advertising rates.

Third, the costs of technology investment in the current timeframe and going forward in the next five to 10-year period are viewed as dramatic, primarily driven by the conversion to digital transmission required for High Definition television and Digital Radio Broadcasting. This will continue to pressure the industry's bottom line.

Fourth, television broadcasting signal theft continues to be a problem for the industry through account fraud, hacked signal cards and illegally modified free-to-air set top receivers. This activity is viewed by respondents as a serious incursion on revenues, both in the broadcasting and distribution of signals

Fifth, resolving the question of multiplatform rights – i.e. who owns the digital rights to content – will have a potentially major impact on the industry in the years ahead.

Sixth, the advertising model for television is also changing as product placement in programming increases (e.g. Ford vehicles on 24, DeWalt Power Tools on *Holmes on Homes*, the digital insertion of ads during live sporting events). Such product placement is counted as advertising inventory by the CRTC which affects the amount of advertising that can be sold by a Canadian broadcaster, and thus affects the industry's bottom line.

At the same time, technology is enabling consumers to control the television advertising they are exposed to, through the use of devices such as TiVo.

Among other issues noted by respondents, there is no sense that consolidation will take place in the industry to any major degree in the next few years. However, should the federal government decide to modify foreign ownership rules for the telecommunications sector, the broadcasting sector may call for a review of similar rules affecting the *Radio and Television Industries*.

The CRTC has also noted the major impact of technology on television broadcasting, and may launch a review of the commercial television policy by 2007. The Commission is currently reviewing the commercial radio policy.

E – *Software and Databases*

As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Software, Databases and New Media Industries* include programming development and design, software and video games, database processing, web portals, on-line services and Internet Service Providers (ISPs).

With respect to the value-added contribution of the *Software and Database Industries* to the Canadian economy, the data indicate significant growth over the 1997 to 2004 period, with contribution to GDP rising from approximately \$5.8 billion in 1997 to over \$12.2 billion in 2004. As noted throughout our Report, the *Software and Database Industries* are clearly an engine of value-added growth for the Copyright Industries overall.

Figures 41 and 42 illustrate the trend in value-added contribution to the Canadian economy by the *Software and Database Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively. The pattern of rapid growth followed by a slowdown in growth is partly due to the maturing of the sector, a shift in structure from large 'one-stop shopping' firms to a greater number of smaller (potentially less efficient) firms and a major increase in global competition in products and services.

Figure 41

GDP - Software and Databases

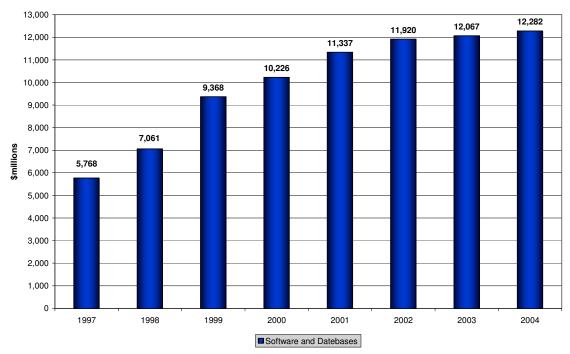
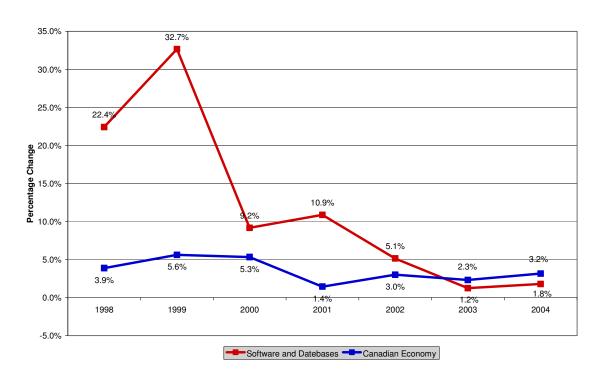


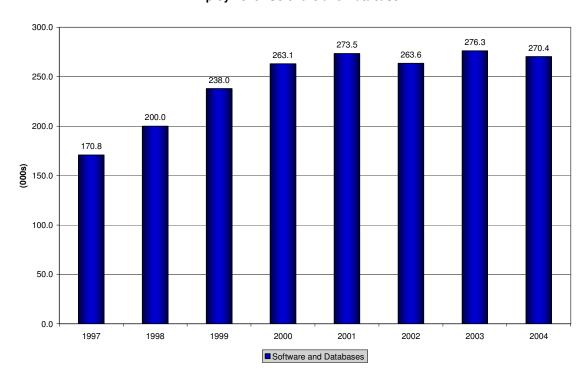
Figure 42

GDP Growth - Software and Databases



As noted in Figure 42, the *Software and Database Industries* peaked dramatically with the dot-com boom of 1999, and have since cooled to track much more closely with the Canadian economy as a whole. The slight cooling off period illustrated in 2003 and 2004 is also demonstrated through sector employment trends outlined in Figures 43 and 44 below. The continued, modest increases in GDP may be partly due to the decreases in employment felt across the sector as consolidation and the movement of companies in and out of the sector continues.

Figure 43
Employment - Software and Database



Employment: Software and Database - Annual Growth Rates

Figure 44

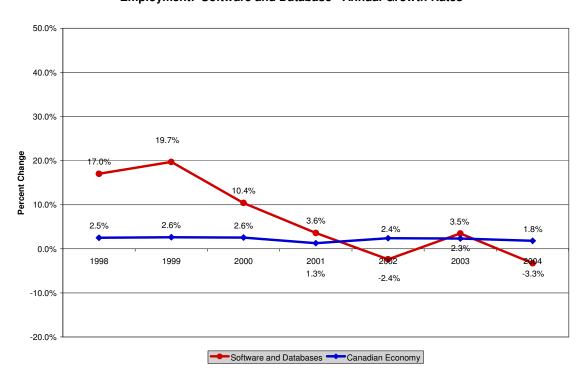


Figure 45 outlines the relative share of employment in the *Software and Database Industries* by province. As illustrated, Ontario has the largest share of employment at 123 percent, followed by British Columbia at 105 percent and Quebec at 94 percent. Saskatchewan has the lowest share of employment in the sector, at 42 percent. This finding would support the view that Ontario continues to serve as the centre of the Canadian sector, with the National Capital Region (Ottawa and area) continuing in its role as 'Silicon Valley North'.

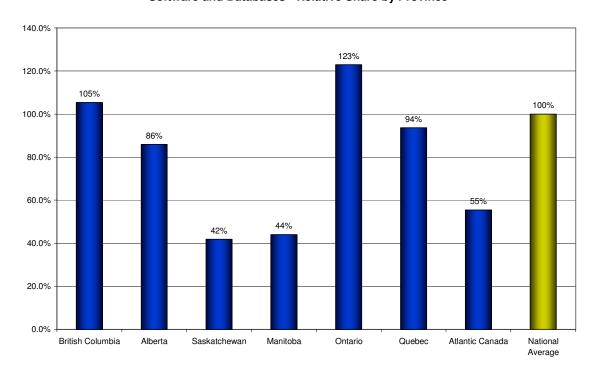


Figure 45
Software and Databases - Relative Share by Province

Discussion

In contrast to other Copyright Industries analyzed, the number one concern expressed by respondents from the *Software and Database Industries* revolves around availability of and access to the *skills* that will sustain growth in the industry going forward.

This is especially pronounced given the shift in the industry – on a global basis – away from 'hardware' to 'software and services'. This has occurred in part because the costs of carriage, technology and storage of data have dropped, driving even traditional hardware companies such as Dell and Intel to explore more revenue options based on software and services. It has also taken place given the rise of 'interoperability' of systems and the use of common platforms.

The current 'softening' or slowdown in the *Software and Database Industries* is attributed to several factors, and viewed as temporary in nature. The primary reason is that the industry has become more 'modularized' or silo-oriented by developing and marketing products and services on a smaller scale for target markets. The large scale enterprises and projects that ignited the dot-com boom have given way to a more down market or 'silo-oriented' approach.

However, there appears to be a further shift in the structure of the sector, with some consolidation taking place at the present time. It is widely viewed that the silo approach is ineffective as a growth strategy over the long term, and that suites of products and services are needed. Those smaller firms that may experience financing problems in expanding domestically or in their efforts to enter international markets are (to a degree) being absorbed by larger enterprises, while the number of mid-size firms declines.

The *Software and Database Industries* are also global in nature and practice, with the free movement of industry players across national borders. Some companies in the sector export up to 90-95 percent of their products as well. The most major concern expressed by respondents is the declining visibility of Canada as a global technology leader, where a lack of industry 'stars' is diminishing Canada's global ranking.

In addition to this, a potential lack of skills available to the sector going forward would likely have an impact on the ability of Canada to improve its global standing, in terms of both image and bottom line growth.

A more secondary reason expressed by respondents for the evident 'softening' of the value-added performance of the sector is that, as the sector matures it is beginning to take on more of the cyclical characteristics of other Copyright Industries. A year or two of softer indicators will likely be followed by a year or two of stronger indicators.

Respondents also noted that copyright policy plays a role in improving the bottom line health of the sector, by providing a value proposition for consumers that replaces the motivation to illegally copy protected material such as software programs or video games. Levies on products that the industry is trying to market on a global basis are viewed by respondents as counterproductive overall.

Respondents further emphasized the continued need for private/public partnerships – e.g. a role for government in assisting with access to capital for younger multimedia companies – and the development of a national strategy on the future of skills in the *Software and Database Industries*.

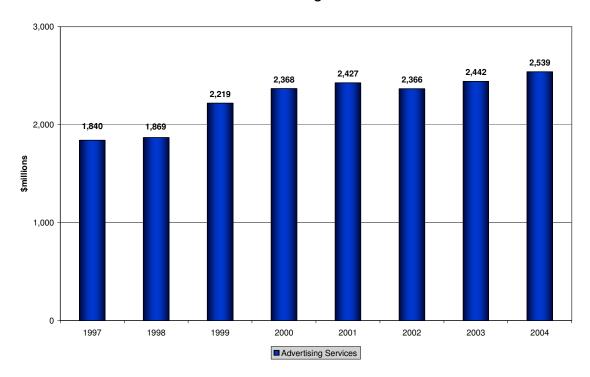
<u>F – Advertising Services</u>

As noted in the WIPO Guidelines referenced at the beginning of our Report, the *Advertising Services Industries* include advertising agencies, media buying services, public relations services, media representatives, display ads and direct mail services.

With respect to the value-added contribution of the *Advertising Services Industries* to the Canadian economy, the data indicate a steady period of growth between 1997 and 2001, a slight decline in 2002 and continued growth through to 2004.

Figures 46 and 47 illustrate the trend in value-added contribution to the Canadian economy by the *Advertising Services Industries* and the growth in GDP relative to the Canadian economy for the 1997 to 2004 period, respectively. The pattern indicates that this sector has effectively resisted the 'softening' that is evident in other Copyright Industries, owing in part to the ability of this sector to leverage expanded opportunities for advertising placement in a digital world.

Figure 46
GDP - Advertising Services



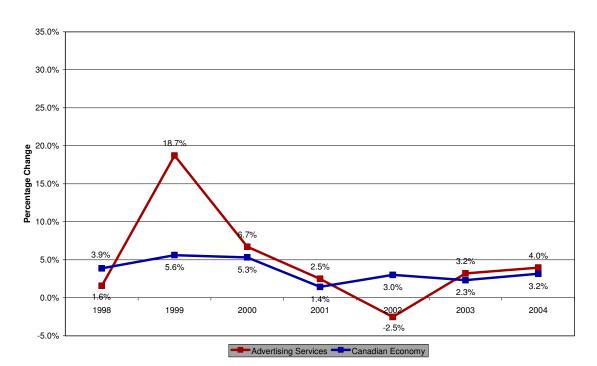


Figure 47

GDP Growth - Advertising Services

As noted in Figure 48, the *Advertising Services Industries* clearly benefited from the dot-com boom of 1999, and have since cooled to consistently track the Canadian GDP overall. Although the sector has shown consistent growth over time, employment rates and growth in the *Advertising Services Industries* show a cyclical trend similar to other Copyright Industries, as outlined in Figures 48 and 49 below in a mild 'wave' pattern of employment increases and decreases.

Figure 48
Employment - Advertising Services

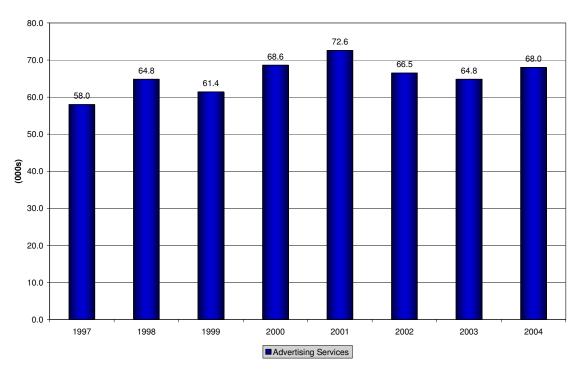


Figure 49
Employment: Advertising Services - Annual Growth Rates

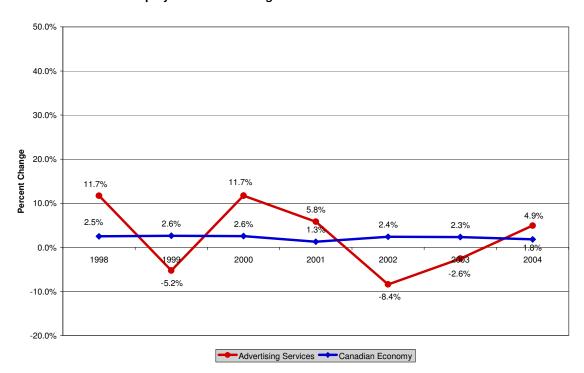


Figure 50 outlines the relative share of employment in the *Advertising Services Industries*, by province. As illustrated, Ontario has the largest share of national employment in this sector at 124 percent, followed by Quebec at 104 percent and Alberta at 81 percent. The Atlantic Provinces have the lowest share of employment at 57 percent. Once again, it is not surprising to see Ontario with the largest relative share of employment, given the major advertising firms tend to locate in the Greater Toronto Area.

140.0% 124% 120.0% 104% 100% 100.0% 81% 80.0% 64% 60.0% 40.0% 20.0% 0.0% British Columbia Alberta Saskatchewan Manitoba Ontario Quebec Atlantic Canada National Average

Figure 50

Advertising Services - Relative Share by Province

Discussion

Advertising services have generally benefited from strong management practices and movement of firms into and out of the marketplace. This sector tends to ride successful waves such as the 1999 dot-com boom while managing to diversify and find new streams of revenue when other sectors may experience difficulties. Consequently, the contribution of this sector to the Canadian economy has shown sustained growth in both value-added and employment components.

The advertising services sector tends to be influenced by developments in other product and services markets, i.e. the 'clientele' of the advertising agencies.

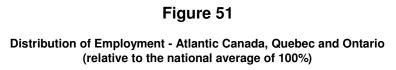
Technology is at once a major driver of new revenue streams and potentially a major issue for the sector. As platforms for content delivery expand – e.g. mobile platforms for audio and video content – so to the opportunities for new advertising revenue and new revenue for the advertising service sector. At the same time, the Internet is continuing to grow as a source of advertising placement and revenue for the sector.

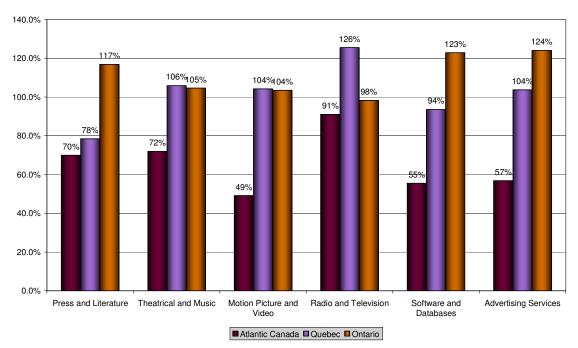
In addition, digital technology itself is enabling an enhanced level of product placement with programming content itself (e.g. the actual placement of products in television programs, or the digital insertion of products in sporting events as noted above in our discussion on the *Television and Radio Industries*). In Canada, the future of product placement is currently a matter of discussion among representatives from the advertising industry, the broadcasting sector and the CRTC.

Competition is extremely strong in the advertising services sector, and the movement of advertising firms in and out of the marketplace is common in this industry. Entry into the sector is relatively easy, and the expansion of advertising-supported content platforms motivates new/smaller firms to set up business. Consolidation also tends to cycle through the industry, creating mid-size firms to compete for advertising contracts with much larger firms – and is expected to continue as an on-going trend in the industry.

Comparative Share of Employment by Province – Core Copyright Industries

In the course of developing the quantitative analysis of Copyright Industry employment levels outlined by sector above, the comparative share of employment by province was also noted. To summarize a portion of this data, Figure 51 below compares three regions of Canada with respect to their relative share of total employment in the Copyright Industries: Ontario, Quebec and Atlantic Canada.





As illustrated above, Ontario has a larger share of employment in *Press and Literature*, *Software and Databases* and *Advertising Services*. Quebec has a larger share of employment in *Radio and Television*, while Quebec and Ontario have virtually identical shares of employment in the *Theatrical and Music* and *Motion Picture and Video* sectors.

Part V – Focus on Sound Recording

As noted earlier in our Report, the *Motion Picture and Video Industries* captures the *Sound Recording Industry* for purposes of WIPO Guidelines and NAICS categories. However, given the importance of copyright-related issues to the Canadian sound recording sector, we have separated the sector for purposes of identifying its value-added and employment contribution to the Canadian economy.

For purposes of our analysis, we have followed the WIPO Guideline for defining the *Sound Recording Industry* which includes: record production, integrated production/distribution, music publishers and sound recording studios. The NAICS categories specifically exclude artists and songwriters, which are classified separately under *Theatrical and Music Production/Opera Industries*.

There is little doubt that the Canadian sound recording sector has undergone significant change in the past several years, primarily as a result of illegal music downloading (or peer to peer file sharing) and the consequent impact on the sale of recorded music. Between 1999 and 2003, the decline in music sales reached 28 percent, reducing total sales from \$1.3 billion in 1999 to \$946.4 in 2003. Sales declined by an additional 2.9 percent in 2004 and by an additional 4 percent in 2005.⁵

The sound recording industry has also been marked by a period of consolidation among the major multinational recording labels (at the recording, but not the music publishing level) that has reduced their number from five to four (Warner, EMI, Universal and Sony/BMG). At the same time, a number of mid-size Canadian-based firms have emerged, leveraging success in the production and distribution of recorded music, and in music publishing, to secure a more solid footing in the Canadian marketplace.

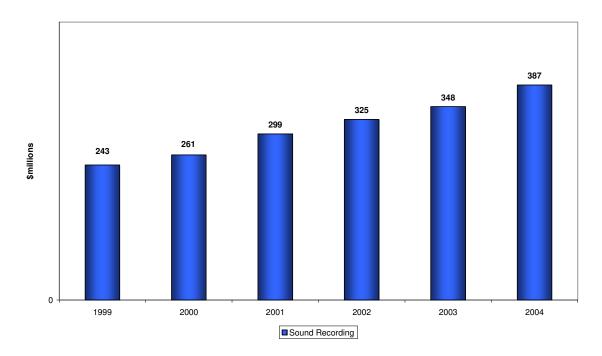
As for the value-added contribution of the *Sound Recording Industry* to the Canadian economy, **we note that these findings should be treated with caution**. This is because the evidence suggests – as noted in Figure 52 below – that the *Sound Recording Industry* has demonstrated steady growth through the 1999 to 2004 period – precisely the same period of years that have seen a significant reduction in product sales.

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⁵ Department of Canadian Heritage, *The Canadian Music Industry: 2004 Economic Profile* Ottawa: Canadian Heritage; IFPI *Digital Music Report* 2006, Internet

Figure 52

GDP - Sound Recording
(a subset of Motion Picture and Video)



As noted in Figure 52, the GDP contribution of the *Sound Recording Industry* has increased from \$243 million in 1999 to \$387 million in 2004 – despite major reductions in the product sales. Based on the qualitative research conducted for the Study, we believe the consistent increase in value-added contribution to the Canadian economy is owed to:

- Consolidation among major multinationals that have taken costs out of the marketplace;
- ➤ The exit of smaller, less efficient firms from the marketplace (the number of companies has fallen from 331 in 2000 to 300 in 2003);
- ➤ Consequent reductions in sector employment levels, where existing firms rebuilt their labour forces with a focus on more productivity and efficiency;
- New entrants to the marketplace carried with them more streamlined efficient operations; and/or
- ➤ Technology advancement reduced costs of production and distribution, resulting in more efficiently managed companies in the sector.

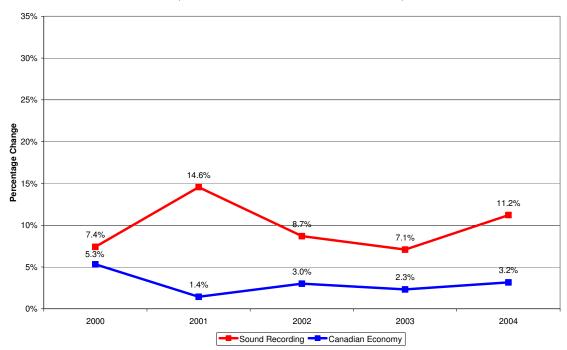
In addition, we note that the value added contribution of the Canadian *Music Publishing Industry* is at least partly responsible for the findings on GDP, as SOCAN payments to publishers have increased in recent years, and as music

publishing has not always been included in previous estimates of GDP contributions by the *Sound Recording Industry*.

At the present time, we do not have sufficient evidence to identify one or more of the above considerations as the driving force for the efficiencies in evidence in the *Sound Recording Industry*. It is likely a case of several factors combining to suggest that the *Sound Recording Industry* has consistently outperformed the overall Canadian GDP since 1999, as illustrated in Figure 53 below.

Figure 53

GDP Growth - Sound Recording
(a subset of Motion Picture and Video)



As noted in Table 4 below, employment levels in the *Sound Recording Industry* have been reduced over the 1999 to 2004 period. For the last three years for which data are available through Statistics Canada, based on a census of companies with record labels, all other companies (e.g. distributors) with record labels and record production firms (but not manufacturers, retailers or freelance record label employees).⁶

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⁶ Statistics Canada, Sound Recording: Data Tables Catalogue 87F0008XIE

Table 4 Employment Levels – Sound Recording Industry

 1998
 3,377

 2000
 3,305

 2003
 3,078

Respondents from the *Sound Recording Industry* noted the following issues as fundamental to their bottom line:

- Access to capital is extremely difficult for the sector especially 230+ independent labels to acquire. Once again, respondents noted that the financial community does not understand the nature and value of rights ownership; given this, stable and predictable funding from government and private broadcasters are key pillars of the industry's infrastructure.
- The ability to monetize the new digital reality of the industry is fundamental to the sector's financial health going forward. Resolving the issue of digital rights' ownership will facilitate this process.
- Technology is a clear driver for fundamental change in the industry; the *Sound Recording Industry* was in many ways a 'test case' for the impact of technology, and points to the importance of leveraging and exploiting the opportunities it presents such as monetizing consumer behaviour.
- > Skills are also a challenge for the sector, particularly in the areas of business management, accounting and legal affairs.
- Access to international markets is key for the success of the industry, but developing international markets is extremely costly.

Consolidation is expected to continue in the industry to some extent, particularly in the development of more mid-size firms engaged in both the production and distribution activities of the industry.

Part VI – Comparisons with Other Countries: United States and Singapore

In drawing statistical comparisons with the U.S. and Singapore core Copyright Industries, it should be noted that it is difficult to draw a year-over-year illustration given differing availability of data in each country.

As demonstrated in Figures 54 and 55 below, the U.S. has shown a pattern of modest growth in GDP contribution and slight decline in employment contribution for the years indicated. The trending in employment contribution for both the U.S. and Canada appears to be similar.

Available data from the core Copyright Industries in Singapore show a somewhat cyclical pattern on GDP contribution while demonstrating strong growth in employment contribution.

Figure 54

GDP - Core Copyright Based Industries - Singapore, U.S., and Canada

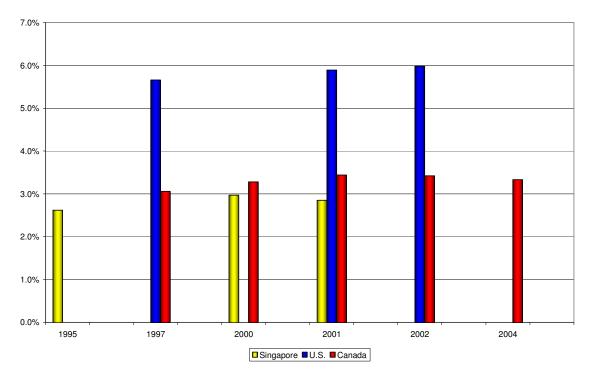
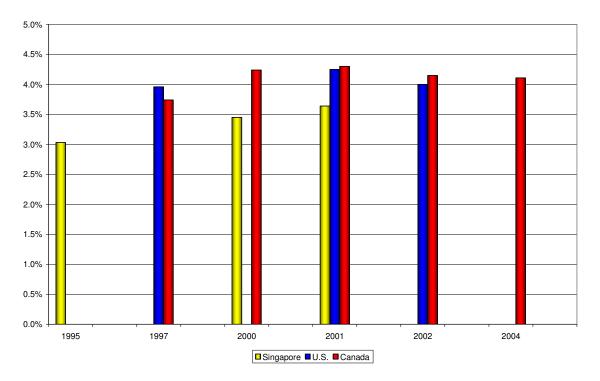


Figure 55

Employment - Core Copyright Based Industries - Singapore, U.S., and Canada



Conclusion

Canada's Copyright Industries perform in a cyclical fashion with respect to their value-added and employment contributions to the Canadian economy, and overall their performance is consistent with the Canadian GDP while often outperforming Canadian employment growth.

Canada's core Copyright Industries comprise 4.5 percent of the Canadian economy, and have grown by 5.7 percent in the period between 1997 and 2004. This growth is faster than that of the Canadian economy as a whole, which has grown at a rate of 3.5 percent over the same period of time. The core Copyright Industries have grown from \$23.6 billion in 1997 to \$34.7 billion in 2004, while the total (core plus non-core) Copyright Industries have grown from \$31.8 billion in 1997 to \$46.8 billion in 2004.

The contribution of the Copyright Industries to Canadian employment has also demonstrated steady growth in the period analyzed. For the core Copyright Industries, employment has increased from 493,300 (or 3.6 percent of total employment in Canada) in 1997 to 655,300 (or 4.1 percent of total employment) in 2004.

For all Copyright Industries (core plus non-core), employment has grown from 4.9 percent of total employment in 1997 to 5.6 percent of total employment in 2004. Ontario, British Columbia and Quebec tend to have relatively larger shares in Copyright Industries employment when measured on a sector by sector basis. Interestingly, British Columbia leads the country in its relative share of employment in three sectors: *Press and Literature*, *Theatrical and Music Production/Opera*, and *Motion Picture and Video*.

On the question of trade in Canada's Copyright Industries, there is little question that Canada's proximity to the United States has influenced our balance of trade in copyright-based goods and services. While most sectors operate at a trade deficit, Canada enjoys a trade surplus in both *Software Royalty Payments* and *Advertising* – demonstrating significant strength in these areas. It is also evident that Canada's overall trade deficit in the Copyright Industries is declining slightly, having decreased from \$3.5 billion in 1997 to \$3.3 billion in both 2003 and 2004.

For the final two years measured in this Study – 2003 and 2004 – a slight 'softening' in economic performance is in evidence for almost all the Copyright Industries. Specific growth in the media sector may be partly responsible for the resistance of both the *Radio and Television Industries* and the *Software and Database Industries* to this slight downward trend. Most respondents are of the belief that this softer period of performance is temporary or transitional, owing in

large part to a current period of decision-making on how to best leverage technologies and shift business models appropriately in a number of sectors.

There is little doubt that *access to capital*, *technology* and *access to/availability of skills* are top of mind for most Copyright Industries with respect to key issues and challenges. There are broad perceptions that:

- ➤ The Copyright Industries and the value of rights is not well understood by investors and financial institutions, and that traditionally low margins tend to dissuade serious investment in all but the *Software and Database Industries*;
- ➤ The pace of technology is extremely fast, and many sectors are in somewhat of a holding pattern as the determine those ways to best leverage and exploit the opportunities of technology;
- Access to skills is a fundamental issue for both *Software and Database Industries* and *Motion Picture and Video Industries*, but access to a pool of talent for more culturally-based industries is not a concern.

In addition, almost every sector would like to see the issue of digital rights resolved.

We have three suggestions for further research:

- 1) The next version of the Study should be conducted once again in 2008 to cover the 2005-2006 data period.
- 2) Just as the *Sound Recording Industry* was selected for separate attention for this Study, another sector should be selected for special 'focus' in the next version of the Study.
- 3) Difficulties in accessing capital by the majority of the Copyright Industries warrants further investigation.
- 4) The relative share of employment by province and the reasons for this distribution also warrant further research.

CONNECTUS would like to acknowledge the valuable support of the Copyright Policy Branch, Department of Canadian Heritage, including Director Jean-Paul Boulay and Project Manager Rizak Abdullahi. Mr. Abdullahi provided exceptional guidance and input to the research team, and was instrumental in the completion of the Report. The Sound Recording Policy and Programs Directorate at Canadian Heritage provided valuable information for the Study. We also acknowledge the assistance and support of Statistics Canada, and thank those organizations and individuals from the various Copyright Industries who participated in the research for the Study.



Appendix A

Methodological Approach to the Study

Our methodological approach to the Study largely adhered to the approach that was applied in the previous study on *The Economic Contribution of Copyright Industries to the Canadian Economy* completed by Wall Communications for the Copyright Policy Branch, Department of Canadian Heritage in 2004.

Quantitative Analysis

As defined by the World Intellectual Property Organization (WIPO), "copyright-based industries" are those engaged in the creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sale of works and other protected subject matter.

For purposes of analysis, the categorization of these sectors was based on the North American Industry Classification Code, mapped against categorizations defined by WIPO.

We applied the WIPO-mandated categorizations and related methodologies to estimate the value and quantitative characteristics of the core Copyright Industries. The WIPO mandated categories were mapped onto the NAICS industry classification. We then gathered the required data for the NAICS categories identified through this mapping.

We applied a similar process for the non-core Copyright Industries. The total for these industries is calculated at 35 percent of the Copyright Industries total. The apportionment was based on our literature search, and on the need for consistency of methodology with the 2004 Study, in order to ensure comparability.

Data was provided by Statistics Canada for the 1997 to 2004 period for the following categories:

Core Copyright-based Industries	GDP/ Value- added	GDP/ Value- added (Growth rate)	Employment	Employment (Growth rate)
1) Press and literature	•••	•••	•••	•••
2) Theatrical and music	•••	•••	•••	•••
3) Motion picture and video	•••	•••	•••	•••
4) Radio and television	•••	•••	•••	•••
5) Software and databases	•••	•••	•••	•••
6) Advertising services	•••	•••	•••	•••

Based on data received from Statistics Canada – through publicly available CANSIM tables and specially requested data runs – data was aggregated for the core Copyright Industries and non-core Copyright Industries.

Consistent with WIPO recommendations, we did not include *Photography, Visual and Graphic Arts* in the findings of our Study. The relevant categories under *Photography, Visual and Graphic Arts* are Photographic Services (NAICS 54192) and Graphic Design Services (NAICS 54143). Statistics Canada was unable to provide reliable data for these subcategories alone, and it was our belief that NAICS 5414 and 5419 contained too many categories that are not defined by WIPO as relevant to the Copyright Industries.

Data on *Copyright Collective Management Societies* is not available from Statistics Canada; this category is therefore not included for purposes of the Study.

Data presented in $Part\ V-Focus\ on\ Sound\ Recording\ was\ acquired\ through\ a$ special run from Statistics Canada (for GDP) and from CANSIM tables (for Employment). Data presented $Part\ VI-International\ Comparisons\ was\ based\ on\ secondary\ reports\ received\ from\ the\ WIPO\ as\ cited.$

One-on-One Interviews

We conducted interviews with 12 associations; a total of 19 people participated as some organizations provided more than one individual to speak with. Another two organizations targeted for interviews did not reply to our requests.

The associations were selected in consultation with the Copyright Policy Branch, Department of Canadian Heritage. Eight of the interviews were conducted by telephone, with the remaining four interviews conducted in person.

Representatives from the Department attended three of the four face-to-face interviews. It was the research team's belief that the Department's presence at these interviews made a contribution to the findings.

Associations were generally contacted by the research team via e-mail to secure their participation and schedule time for discussion. Interviews typically lasted for 45 minutes to one hour depending on the number of people in attendance. A list of associations and representatives interviewed is attached as Appendix C. A list of questions was drawn up in consultation with the Department, and is attached as Appendix D.

In addition to the interviews, informal consultations were held with Department officials from the Copyright Policy Branch and Sound Recording Policy and Programs Directorate, as well as with officials from the Copyright Board of Canada and WIPO. Officials from Statistics Canada were consulted regularly throughout the course of the data collection and analysis period and were instrumental in the completion of the Study.

Interview respondents' perspectives are integrated into the 'Discussion' sections for each of the Copyright Industry sub-sectors included in our Report.

<u>E-mail Survey</u>

Toward the mid-point of the research, the Department requested that an e-mail survey be developed and sent to those organizations that were contacted via an e-mail questionnaire for the Wall Communications Report of 2004.

The e-mail questionnaire and list of organizations contacted is attached as Appendix E. We elected not to send e-mail questionnaires to those organizations that agreed to one-on-one interviews.

The e-mail survey was circulated to a total of 30 organizations. It is typical to receive low response rates – in the 5 to 7 percent range – for 'blind' e-mail surveys that are accompanied by little or no additional contact, such as telephone calls or other correspondence. Although the response rate in this instance was 20 percent, we note that relatively small number of responses were sufficient to achieve this.

E-mail survey responses are also integrated into the 'Discussion' sections of our Report where relevant.



Appendix B

Differences Noted in Base Data: 2004 and 2006 Studies, Economic Impact of Canadian Copyright Industries – Sectoral Analysis

As noted in the notes on our *Methodological Approach* outlined in Appendix A, we were cognizant of the need for consistency of our methodology with that of the Wall Communications Report of 2004 in order to ensure comparability.

We noted a number of small difference in the data collected from Statistics Canada for this version of the Study, compared to the data presented in 2004 version of the Study. Many of these can be explained as data refinements by Statistics Canada, and did not materially alter the outcome of comparative findings.

Two substantive differences between the 2004 Study and the 2006 Study were noted which influence the comparative findings.

First, the 2004 Study included *Photography, Visual and Graphic Arts Industries*; as noted, Statistics Canada was unable to provide data for those subcategories that WIPO defines as relevant to copyright, for the 2006 study. While we included a small quantum in estimating total GDP and employment contributions, we did not present these segments separately.

Second, Statistics Canada provided different information on the contribution of the *Press and Literature Industries* to GDP for the 2004 Study and the 2006 Study, especially for the year 2002. For the 2004 Study, the figure reported for 2002 was \$9.1 billion; for the 2006 Study, Statistics Canada reported a figure of \$8.2 billion for 2002.

The combined effect of differences in reporting of figures for the *Press and Literature Industries* and deletion of the *Photography, Visual and Graphic Arts Industries* is primarily seen in GDP contribution and annual growth of GDP contribution for the years 1997 to 2002.

For example, for the year 2002: the 2004 Study estimated the contribution to GDP by core Copyright Industries of 3.99 percent, with annual growth of 5.3 percent. The 2006 Study estimated 3.42 percent GDP contribution and 2.3 percent annual

growth. Had the 2.3 percent growth figure been presented in the 2004 Study, the softening of growth in the Copyright Industries would have been evident.

In addition, with respect to employment figures the 2004 Study used data classified based on the 1997 NAICS, while the 2006 Study uses data classified based on the 2002 NAICS.

The 2006 Study includes a breakdown of employment in the Copyright Industries by province, which was not included in the 2004 Study. We further expanded the trade analysis beyond the 2004 Study to include services (not just goods) and to include all Copyright Industries, not just cultural industries.



Appendix C

List of Interview Respondents

Associations

Gilles Bertrand, NumeriQC

Lodi Butler/Robert Wong, B.C. Film

Wayne Charman, Canadian Association of Broadcasters

Bernard Courtois, Information Technology Association of Canada

Solange Drouin, ADISQ

Margaret Eaton, Kirk Howard, Anne Brackenbury, Association of Canadian Publishers

Cori Ferguson/Brian Chater, Canadian Independent Record Producers' Ass'n

David Gollob, Canadian Newspaper Association

Mark Jamison/Gary Garland, Magazines Canada

Ann MacKenzie, Nova Scotia Film Development Corporation

Guy Mayson/ Steve Ellis, Canadian Film and Television Production Association Claire Samson, APFTO

Catharine Saxberg, Canadian Music Publishers Association

Government/Agency Consultations

Jean-Paul Boulay, Rizak Abdullahi – Copyright Policy Branch, Department of Canadian Heritage

Kevin MacDougall, Lynn Buffone – Sound Recording Policy and Programs Directorate, Department of Canadian Heritage

Gisele Parent – Statistics Canada

Dimitri Gantchev - WIPO

Appendix D

Interview Questions

- 1. Tell me a little about your organization and activities you undertake on behalf of your members.
- 2. What are the factors affecting your industry's bottom line at the present time? For example, would it be access to capital, skills shortages, access to foreign markets or other factors. These factors might include:

Technology/Technological change Consumer Behaviour (e.g. purchasing habits) Global competition Access to Financing Government regulation and policy Other issues

- 3. I would like to talk a little about your industry's economic performance from 1998 to 2004. (Explain the economic trends to the respondent, point out swings and standouts.) What factors do you believe contributed to the trends we are seeing in your industry?
- 4. Talk to me a little about the ways in which technology as influenced your industry and its economic health. Has it been a negative or positive influence, or both?
- 5. To what extent is foreign presence/competition a factor for your industry? In what way? Do you have specific examples or anecdotes?
- 6. To what extent do you have/need access to foreign markets? Do you see ways of improving your industry's export capacity? Do you have concerns or comments about any measures required to support your industry's export capacity?
- 7. Do you anticipate that your industry will consolidate in the next three to five years? How will this impact your industry and its services?

- 8. What is your biggest concern about or challenge regarding the future of your business? Over the next three to five years, do you see your industry growing, remaining stable, or getting smaller? Why?
- 9. Do you have any other comments or have anything else to add before we close?

Appendix E

E-mail Survey and Organizations Contacted

Survey Questions

We are conducting a study on *The Economic Contribution of Copyright Industries* to the Canadian Economy on behalf of the Department of Canadian Heritage. To expand on our analysis of economic factors such as GDP, employment and balance of trade, we are conducting an email survey of selected organizations in the copyright industries.

The questionnaire is brief, and should take no more than 15 to 20 minutes to complete. Your participation will provide important information in the completion of this project.

Kindly return the completed survey to: connectus.richard@sympatico.ca.

Thank you very much.

1) Please rank the following factors in order of importance in shaping the financial health of your industry over the past decade (with one as the most important factor):

Technology/Technological change Consumer Behaviour (e.g. purchasing habits) Global competition Access to Financing Government regulation and policy Access to skilled labour Other

- 2) What is your most important market, by age group (e.g. 12 17, 18 24, 25 34, 35 49, 50 64, or 65+). Indicate more than one group if necessary.
- 3) What is the most significant challenge facing your industry today? Over the next 3 to 5 years, what do you see as the greatest challenge for your industry?

- 4) Would you judge your industry's overall economic performance over the past three years as (i) growing, (ii) stable, (iii) declining or (iv) mixed? What are the major factors contributing to this performance?
- 5) Do you believe that your industry will grow year over year in the next 3 to 5 years? If yes, the industry will grow by _____% per annum.
- 6) Is significant consolidation likely in the 5 years?

Organizations Contacted

Access Copyright

Alliance of Canadian Cinema, Television and Radio Artists (ACTRA)

Alliance de la vidéo et du cinéma indépendants

Association for Media and Technology in Education in Canada

Association for the Export of Canadian Books

Book Promoters' Association of Canada

Book Publishers' Professional Association

Bureau of Canadian Archivists

Canadian Artists' Representation

Canadian Arts Presenting Association

Canadian Association of Music Libraries, Archives & Documentation Centres

Canadian Association of Research Libraries

Canadian Bookbinders and Book Artists Guild

Canadian Booksellers Association

Canadian Copyright Institute

Canadian Interactive Digital Software Association

Canadian Library Association

Canadian Motion Picture Distributors Association

Canadian Museums Association

Canadian Private Copying Collective

Directors Guild of Canada

Federation of Canadian Artists

Interactive Multimedia Arts and Technologies Association

Ontario Association of Architects

Ontario Library Association

Société du droit de reproduction des auteurs, compositeurs et éditeurs au Canada

Société professionnelle des auteurs et des compositeurs du Québec

Société québécoise de gestion collective des droits de reproduction

Society of Composers, Authors and Music Publishers of Canada

Writers Guild of Canada

Appendix F

Study Research Team

The Project Manager, Qualitative Research Lead and Report Co-author for the Study was **Richard Cavanagh**, Partner with CONNECTUS Consulting Inc.

Mr. Cavanagh has a combined 20 years' experience in public policy research and analysis – including telecommunications, broadcasting and sound recording – and over has completed and written reports for numerous research projects involving extensive qualitative research, several directly involving research into competitive issues affecting Canada's Copyright Industries.

Mr. Cavanagh holds a Ph.D in Social Sciences from Carleton University and an M.A. in Sociology from Queen's University.

The Quantitative Research Lead and Report Co-author for the Study was **Peter Macaulay**, President of P. Macaulay and Associates Inc.

Mr. Macaulay is a Chartered Accountant, CA designated specialist in Investigative and Forensic Accounting, and a Certified Public Accountant with significant experience in the analysis of copyright and the forecasting of economic impact on broadcasting. Mr. Macaulay's has on three occasions provided expert testimony to the Copyright Board of Canada, to assist the Board with the establishment of royalty levels for Neighbouring Rights, Broadcast Mechanical Tariff and Performing Rights.

Mr. Macaulay has an MBA from the University of Western Ontario, and undergraduate degrees from the University of Windsor and Queen's University.

The Project Interviewer for the Study was **Emmanuelle Savaria**, an independent consultant and researcher based in Ottawa. Ms. Savaria is fluently bilingual and has extensive experience in the design and application of qualitative research methodology. Ms. Savaria holds a B.S. in Administration (Marketing) from the University of Sherbrooke.